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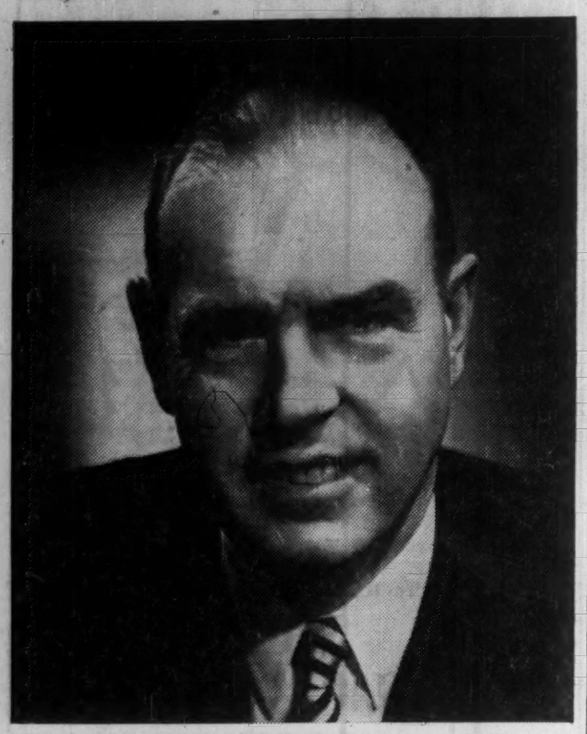
Heads Chemical Industry



Wilfred Newman Hall is the new president of the Chemical Institute of Canada. He takes over leadership of the 6,500-member national organization of chemists and chemical engineers at a period of peak activity. Hall, 51, is president of Dominion Tar & Chemical Co. Our chemicals makers had record sales of $1.4 billion last year.
(Personality sketch, p. 6. Chemical industry report, pp. 51-74.)

NATION'S BUSINESS

He Says We Need Fatter Dividends

"Government should concentrate all its efforts on increasing savings in the personal sector. . . . Internal savings by corporations may have already gone too far. . . . It might even be appropriate to devise the necessary tax measures to encourage a wider distribution of corporate earnings."

So states Eric W. Kierans, the new president of the Montreal and Canadian stock exchanges. These iconoclastic views are already producing pained expressions in a number of boardrooms.

As Kierans points out, over a period of 16 years (1936-51) 603 major Canadian corporations financed 82.2% of their growth by internal funds—and only 9% by bond borrowings from the public, 8% by common stock sales and 1% by preferred sales.

But his views are in line with the increasingly widespread comment that the ordinary shareholder is decreasingly significant in the corporation; that the typical corporation is fast becoming the big machine run by a few professional management people; that the primary interest of the professional managers and of the chief owners is often likely to be very different to that of modest shareholders. Dividend policy is one example of divergent interest.

Capital gains are usually of prime interest to the well-heeled group controlling a company's stock, while dividends may be of very real concern to the ordinary shareholder.

If broader stock ownership of industry is a sensible objective for the kind of capitalism we have today, the Kierans approach will have many friends.

If this country's national objective is less rapidly growing foreign ownership of industry, any tax changes encouraging companies to sell more stock would help.

Another side of the argument is that corporate use of retained earnings and depreciation allowances has permitted rapid industrial growth and plant modernization. In a violently competitive climate Canada needs the latest industrial machinery, the newest techniques.

However, the new and refreshingly contentious president of the Montreal exchanges has indeed given both tax authorities and company executives something to ponder.

* * *

Combines Police Ride Again

Like excited dog catchers closing in on a not entirely healthy mouse, Ottawa's combines men have pounced again.

This time they have "reported on" several "non-life" insurance associations. These are groups of insurance companies which set auto insurance premium rates for different categories of drivers in different types of driving areas. And they ask their member companies to stick by the rates.

There is a "distinct possibility" that this system of "compulsory uniformity" may breach the combines law, the Restrictive Trade Practices Commission says.

But what, if anything, ails this industry is cut-throat competition. So close to the bone is this industry's figuring that federally registered companies as a group suffered underwriting losses in 1956, 1957 and 1958—just about the time the combines men were sniffing around suspiciously. Policyholders, in short, got bargain-rate coverage.

The companies specifically under attack write only about one third of all auto insurance premiums in Canada. And they face the competition of some of the biggest firms in the business, especially American firms which aren't association members and who do offer their own "bargain" prices.

Despite the higher rates of the companies now under criticism, the public has kept them in business because they give the public what it wants: (1) Good agency service (2) good records (generally) for meeting claims.

In the public interest, Canada's insurers have to stay solvent. But so precarious is their position that Kenneth MacGregor, Superintendent of Insurance, commented:

"Competition has probably been felt . . . most keenly of all in Canada. . . . What appears to be required is not merely an upward revision of premium rates but also a thorough re-examination of underwriting practices, expenses and policy benefits."

It is Canada's curious combines laws—which ignore whether trade arrangements are in the public interest—that have led the cops into this goose chase.

Why did they choose to bang their net down where there is so much competition and so little profitability?

More Mines Merge?

By ALEX WILSON

Watch for talk of new mergers in mining circles, as management takes a new look at the possibility of tax advantages of mergers.

Behind the stepped-up interest: The proposal to merge **Giant Yellowknife Gold Mines** and **Consolidated Sudbury Basin Mines** (FP, June 4).

Details, p. 48.

One hoped-for byproduct of the proposal is to move the $7.4 million development expenses and $8.1 million undepreciated capital costs of the idle Consolidate Sudbury into a producing company.

Part of these costs, under present tax laws, can then be applied against profits to reduce taxes, it is believed.

Key to further mergers rests with Ottawa. It is not known how much of Sudbury's costs will be allowed as a tax deduction.

Ottawa may move to stop some of these deductions by new legislation, if authorities there consider that the moves are not within the intent of the law.

But if Ottawa doesn't make a move, there are many other exploration companies around with large development expenditures on their books.

While the way has been clear for such mergers since 1955, mining companies haven't tried to take advantage of deduction provisions on mergers.

In the mining field, one candidate may be **Nickel Mining & Smelting**, still working on its northwestern Ontario nickel property where it has spent nearly $5 million on exploration. **Faraday Uranium Mines**, which recently took over the work, might merge with Nickel to pick up the tax credit.

A similar situation exists with **Consolidated Mosher** which has spent about $2.6 million. It could be taken over by **McLeod-Cockshutt** which holds effective control.

Hint at Lower TransAtlantic Airline Fares

MONTREAL (Staff)—TransAtlantic airlines have tuned out the overcapacity blues and now are racing to meet amazingly strong demand.

Airmen describe bookings to Europe for 1960 as fantastic. If this continues, lower rates eventually could be the result.

Unless the international or economic scenes take a turn for the worse, airmen are betting they will carry well over a million passengers across the Atlantic in the six months April to September.

That compares with 900,584 for the same period of 1959 — which was 12% more than the same time in 1958.

This week International Air Transport Association released the official figures for the first three months of this year.

Atlantic carriers flew 228,027 passengers on scheduled flights. That is 19.5% more than for the same period of 1959 — and equal to the peak third quarter only five years ago.

Second quarter estimates from airlines queried by FP run from a 15% increase to 20%.

"It's upset almost all our predictions," one airline official told FP. "Some people said that everyone would want to fly in the jets, and others said they would hold out for the cheaper non-jet flights.

"In fact, we are filling everything that flies."

If the winter traffic develops into another surprise boom, the airlines are going to be in a mood to consider new fare cuts when the IATA traffic conference meets again toward year's end.

And that might signal yet another upsurge in traffic.

Why our automotive industry is in trouble ..... pp. 25-26

How to measure your business growth ..... p. 11

How investment men see the economy ..... pp. 30-34

Feature report on chemical industry ..... pp. 51-74

Gimmick Market In Gay Gaslight

By W. L. DACK

It's back to the gaslight era in Canada.

The suburbanite's vague yearning for some symbolic connection with the past has produced a new twist:

A spreading trend in southern Ontario to ornamental outdoor lighting by gas.

Suburban home-owners have started installing fancy metal lamp-posts reminiscent of the gaslit '90s. But the fuel is natural gas — all the way from Alberta.

It opens a new gimmick market in Canada, so stand by for a flood of Gay Nineties ideas. Maybe you've got a few yourself?

The present metal lamp posts, sold by **Consumers' Gas Co.**, Toronto, cost about $30 each, and the company charges another $50 for installation.

They're not converted 1890-vintage lamps, but are made specifically for natural gas.

The gas lighting doesn't cost much more than $1.50 a month for continuous service.

One popular use: Illuminating private swimming pools. The gas lights aren't supposed to attract bugs.

Outdoor lighting by gas is a rapidly spreading vogue in suburban areas of many U. S. cities.

One Canadian gas company official told FP: "There's more gas lighting in the U. S. now than even in the heyday of manufactured gas 70 years ago."

But gas lighting is competing on more than just ornamental grounds.

A large new commercial airport now under construction near Toronto will be illuminated by natural gas.

Now's the Time to Think About This 'Boom' Plastic

If you have never thought much about polypropylene — and chances are you haven't — it's nearly time you did.

It's going to be the biggest thing since polyethylene, and it's bound to affect you, either in helping your business or providing you with a suit.

Here are some of the things it can do:

- **It's the lightest** of all plastics, which makes it handy for luggage, vacuum cleaner attachments and other products where weight is important.
- **It's the first** relatively low-priced plastic that can stand temperatures hotter than boiling water for long periods without damage and resists the effect of chemicals, which makes it important for many industrial uses.
- **It can be turned** into fibres to make marine ropes, men's suits — can be spun, crimped, textured, woven, knitted and blended with natural or other synthetic fibres.
- **It is easily machined** into wrappings for bread or other packages.

So far only three firms produce it — two in the U. S., one in Italy. But another half dozen, including two major U. S. oil companies, are rushing plants into production.

Who will be first to make it in Canada?

Chances are it will be one of these:

Canadian Industries Ltd., Du Pont of Canada, Dow Chemical Co. of Canada, Union Carbide Canada.

No doubt it will cut into sales of other plastics — particularly polyethylene—but biggest sales will probably be in entirely new uses for which plastics so far have been unable to supplant conventional materials.

The major raw material for polypropylene is propylene which is available in Canada from oil refinery streams or can be processed from propane from certain wet gas fields in Western Canada.

Expect Cocktail Bars In Nova Scotia by '61

From Our Own Correspondent

HALIFAX — Brewers, distillers, decorators, furniture makers and prospective tourists take note:

A revision of Nova Scotia's liquor regulations to permit cocktail bars now seems likely.

That's the word from authorities who should know.

In the wake of the recent provincial election, which saw Premier Robert L. Stanfield's Progressive-Conservative government returned to power with an increased majority, liquor has become a hot topic.

It had been removed from the realm of political campaigning when a royal commission on liquor was set up prior to the election.

In the pre election weeks, the six-man commission confined itself to a few preliminary studies.

Chairman Frank Rowe says more comprehensive work will begin almost immediately. The report is expected early in 1961.

Contentious liquor laws have been under heavy fire by labor, trade boards and innkeepers, who insist the tourist trade will never reach its potential until they are amended.

The feeling is that the Progressive-Conservatives, having been given a clear mandate, will act quickly to amend regulations on distribution and consumption of liquor if the royal commission report favors such legislation.

Signs & Portents

ELECTRIC home heat cheaper than gas or oil? Heat pumps may hold the key. One installation near St. Catharines, Ont., is being studied by Ontario Hydro. U. S. figures indicate such a pump can cut electric heat costs below competition's. And air conditioning is a summer bonus.

* * *

AIR - CONDITIONED suit: U. S. firm has patented clothing that will either warm or cool you. You throw a switch one way for summer comfort, the other way for winter warmth.

* * *

TOAST your fried egg. U. S. university has developed a freezing process for fried eggs, wrapped in special aluminum foil. Heat to eat by dropping them in the toaster.

* * *

BUS-BACK is following piggyback, fishyback and birdyback. In experimental runs, highway buses tow 1½-ton trailers carrying express shipments between Joplin, Mo., and Harrison, Ark.

* * *

AUTOMATIC railway in Swedish mine could be a sign of things to come in Canada (FP, June 4.) At a big iron ore mine at Kiruna, electronic "brain" automatically controls 16 electric trains on 10 mi. of railway track.

* * *

VITAMINS, cough syrups, and other oral medications may soon come packaged in aerosol bomb containers like shaving creams. Scientists say these medicines can be packed under nitrogen and dispensed as liquid streams through metered valves in controlled dosages.

'MODERATE' HIKE

Ottawa Plans Tax Boosts On Car Imports

We can do it by hoisting valuations, without breaking our trade agreements. But don't expect much change on the price tags . . .

By MICHAEL BARKWAY

OTTAWA (Staff)—A moderate increase in the valuation of British cars for tax purposes is expected in the near future. It may also apply to cars imported from Europe.

Higher sales and excise taxes in the dealers' costs might result in a mild increase on the price tags of imported cars.

In our highly competitive automobile market, it's quite possible that dealers would absorb this increase without raising the nominal retail price. Some, however, might get it back by offering slightly lower trade-in values.

This measure of relief for Canadian automobile manufacturers can be provided by a simple administrative decision without raising any question about international obligations.

Currently British-made cars come to Canada duty free. Canadian-made cars pay 20% entering Britain.

But any attempt to impose tariff duties on British automobiles would require a new negotiation which might bring an increase in U. K. tariffs on Canadian goods.

Reginald Maudling, president of the U. K. Board of Trade, stopping here briefly last week on his way to New York, said flatly and publicly that Canada had "bound" its tariff rate on cars from Commonwealth countries at zero; and he left no doubt that the U. K. government would consider any change as upsetting the whole tariff balance between Canada and U. K.

The valuation of imported cars is quite a different matter.

It provides the basis on which excise taxes and sales taxes are applied.

It is laid down in the Customs Act, and depends (broadly) on the "fair" home market value in the country of origin of the same goods when sold in like quantities and like conditions.

More about cars, imported and domestic, pp. 25-26.

More about the tariff itself, p. 16.

So far British (and to some extent European) cars have been valued according to a price list that shows the manufacturers' price to dealers according to the quantity of the sale.

On April 11 this year the Customs and Excise Division of the National Revenue Department wrote to its representa-

(Continued on page 8, col. 5)

Bamboo Pole TV Antennas

Here's something different in TV antenna towers: 40 ft. bamboo poles from Japan.

About 200 of the poles are expected in Toronto July 1 for **Hosick Television Co.**

Wesley Hosick, president, says he already has orders for 15 of them, which will sell for about $65. That's cheaper than most steel towers.

The poles will be held erect by the ground and a wall bracket on the house. They weigh about 70 lb., vary from 3½ in. to 5 in. thick.

In the Orient, bamboo is used as masts for sailing ships, so the poles will be strong enough to take the winds here, Hosick says.

Bamboo has a breaking strength of 8,000 to 10,000 lb. per sq. in., stronger than any natural Canadian wood, he added.

How Much Boom?

The Outlook

An FP roundup of the latest facts and expert opinion on the economic weather in the U. S. . . .

By *DALTON ROBERTSON*

UNDERLYING conditions do not indicate that U. S. business is falling into a period of real deterioration or downward spiral. Disappointment this year is due more to inventory oscillations which started in the first quarter of 1959.

"But there is no stimulus in sight to overcome this at present or even to assure a very marked upturn by fall, by which time the present period of expansion will be 2½ years old and getting, perhaps, a little tired."

That is the outlook in the U. S. as business specialists in the influential **First National City Bank of New York** size it up.

And if the bank's forecasts are as accurate now as they have been in the past, the implication for Canadian business isn't exactly an optimistic one. With some 15% of total Canadian production currently sold every year in the U. S., the trend of business to the south of us provides a key indicator of the shape of things to come for Canada.

It is true, let it be granted, that the Canadian economy no longer catches pneumonia every time the U. S. sneezes. The U. S. is too dependent on many Canadian resource items to cut them back sharply at the slightest sign of a fall-off in U. S. business.

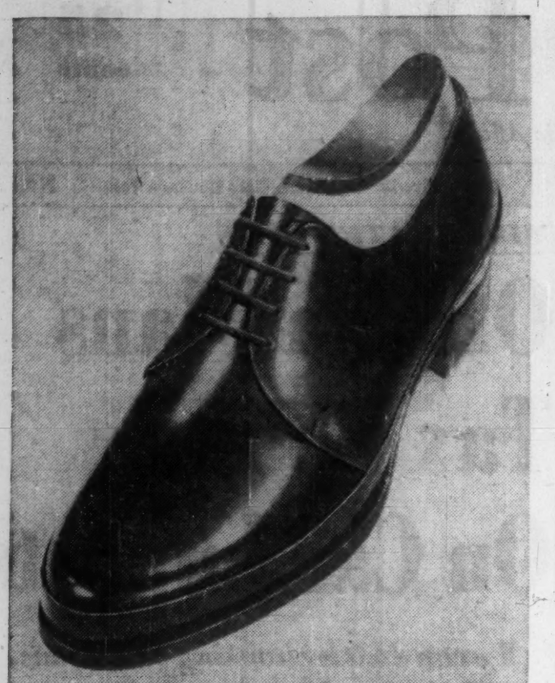
As the Montreal investment house of **Collier, Norris & Quinlin** points out: "The first quarter of 1958 was the low point of the severest recession experienced by the U. S. in the postwar era. Yet in this quarter our exports declined by the insignificant figure of 1.1% and in the entire year a decline of only 1.2% was recorded."

In addition, **while Canada's exports are now about 15% of GNP, back in 1946-48 they accounted for 20% and ran as high as 23% in 1926-28.** But if the impact of U. S. business trends is, happily, less than it used to be, it is still a major factor in determining the climate for Canadian business.

Business inventories in the U. S., after building up spectacularly before the big 1959 steel strike, are currently in a neutral position—in fact declining in some lines. With lots of capacity visible in many plants and with little likelihood of price increases, there is little reason to speculate on a U. S. inventory buildup this year.

Steel mills, which in the U. S. are a very good barometer of general business trends, are now producing at only 60% or so of capacity. Leading analysts are beginning to wonder if the second half of 1960 will see the mills operating at an average of 75% capacity—which would be a decent seasonal

(Continued on page 8, col. 2)



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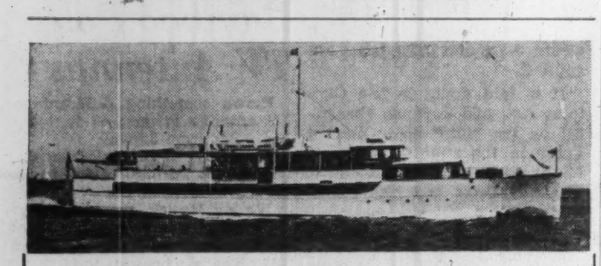

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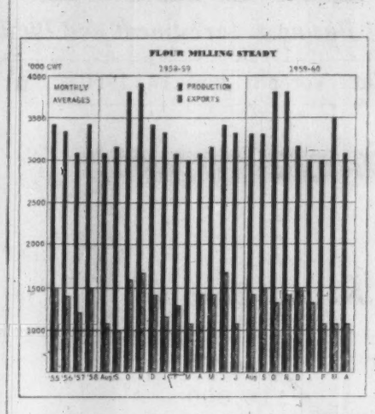
Trend of Business

Production of wheat flour in April rose 1% over like 1959 month to 3.1 million cwt., bringing output in first nine months (August-April) of 1959-60 crop year to 30.2 million cwt., 1.2% better than 29.9 million cwt. a year earlier. Exports in the month were 1.1 million cwt. (1.1 million last year) and in crop year to date, 12.0 million cwt. (11.8 million cwt.). In 1958-59 crop year, monthly production averaged 3.3 milli n cwt., exports, 1.3 million cwt.



Lower imports narrow trade gap. Purchases from other countries in April are estimated at $477.1 million, down 7.8% from $517.6 million in like 1959 month. Exports totaled $368.8 million resulting in trade deficit for month of $108.3 million ($115.2 million year ago). In first four months, imports were up 4.1% at $1,806 million while sales abroad rose 14.2% to $1,660 million, placing adverse balance this year at $145.4 million ($281.4 million).

Big store sales ahead of last year. Department store sales in April rose 7.2% to $116.5 million ($108.6 million year ago), placing first four months' total 2.5% above last year at $398 million ($388.4 million). In April, all provinces except Saskatchewan bettered their sales of a year earlier; Saskatchewan and Alberta were the only two with lower sales in the four-month period.

Millinery sales made the best gain (34.2%) in April over a year ago. Other big increases: girls' and infants' wear (27.7%), boys' clothing and furnishings (23.6%) and hosiery and apparel accessories (19.8%). Declines in the month: major appliances (—13.3%), furs (—8.2%) and linens and domestics (—7.8%).

Chain stores also increased their turnover in April to $295.2 million, 17.3% ahead of $251.7 million in corresponding 1959 month. Sales in January-April period this year rose 7.5% to $1,012 million ($941.7 million year ago). Grocery and combination store chains sold $140.3 million worth of goods in April, up 18.6% from $118.4 million a year ago.

Automobile manufacturers busier than year ago as 12.3% increase in output of motor vehicles in May (45,519 units vs. 40,524 units last year) leaves first five months' production 7.2% ahead of like 1959 period (212,759 units vs. 198,486). Passenger car output in May totaled 37,833 units (32,575 year ago) and in five-month period, 174,730 units (164,775).

Steel production rate slows down in May but good gains in earlier months boost ingot output for year to date 15.8% over year ago to 2.7 million tons (2.3 million tons last year). May output totaled 489,298 tons, up 1.9% from 480,084 tons in like 1959 month. In week ended June 4, the steel mills operated at 78% of rated capacity (93% a month earlier).

Major Weekly Indicators

	Latest or Week	Date Ended	Previous Week	Change from Month ago %	Change from Year ago %
Passenger car production	(June 11)	8,170	8,668	— 11.1	+ 3.4
Truck production	(June 11)	1,633	1,927	— 6.4	— 18.4
Bus. fail. 4-wk. moving av. (no.)	(June 2)	35.3	36.5	+ 3.8	+ 21.7
Steel ingot production .. (tons)	(June 4)	100,727	100,397	— 16.2	— 4.0
Steel production .. (% capacity)	(June 4)	78.0	77.7	— 16.2	— 3.0
T.S.E. industrial index	(June 14)	498.63	500.63	+ 0.9	— 5.9
Yield 114 stocks	(June 13)	4.76%	4.79%	— 0.6	+ 17.8
Chartered banks					
Personal savings . ($ millions)	(June 1)	7,104	7,056	— 0.5	— 0.7
Loans outstanding ($ millions)	(June 1)	6,168	6,086	+ 0.1	+ 2.7
NHA mtge. hldgs. ($ millions)	(June 1)	983	983	+ 0.2	+ 15.9
Bank clearings					
Montreal ($ millions)	(June 10)	1,156	1,221	+ 5.9	+ 33.0
Toronto ($ millions)	(June 10)	1,524	1,829	+ 18.1	+ 2.2
Cdn. dollars .... (U.S. cents av.)	(June 14)	101.774	101.683	— 0.6	— 2.3
Carloading totals	(May 31)	*96,706	78,836	+ 7.2	— 5.7
Eastern Canada	(May 31)	*61,499	49,873	+ 7.6	— 9.5
Western Canada	(May 31)	*35,207	28,963	+ 6.7	+ 1.6
Iron and steel mfg.	(May 31)	* 1,545	1,304	— 11.9	+ 2.5
Ores, concentrates	(May 31)	*14,101	11,084	+ 75.9	+ 5.2
Base metals	(May 31)	* 849	588	+ 0.7	— 11.2
Lumber, timber plywood	(May 31)	* 5,661	4,384	+ 11.5	— 23.6
Cement	(May 31)	* 885	719	+ 31.9	— 17.4
Bank of Canada holdings of					
Securities ($ millions)	(June 8)	2,665	2,667	— 0.9	— 1.4
Short-term govt. . ($ millions)	(June 8)	836	833	— 7.9	+ 86.6
Long-term govt... ($ millions)	(June 8)	1,753	1,758	+ 2.8	— 19.8
Other securities .. ($ millions)	(June 8)	14	14	——	+ 7.7
Department store sales					
% change from year earlier	(May 28)	—20.8	+14.9	— 11.9	+ 10.4

*Ten-day end-of-month period.

Facts by the Month

	Latest Month	One Month Previous	Change From Two Months Ago %	Change From Year Ago %
WHAT WE PRODUCE—				
In all industries (Index)	Mar. 169.3	169.2	+2.1	+5.5
In factories (Index)	Mar. 150.5	149.0	+3.0	+4.1
Total nondurable goods (Index)	Mar 148.6	147.6	+3.8	+4.1
Food & bev.	Mar 127.8	124.9	+5.1	+0.8
Textiles	Mar. 136.9	131.6	+9.8	+8.7
Clothing	Mar 119.7	119.7	+5.8	—1.6
Chemical products	Mar. 214.1	213.8	+11.1	+14.4
Total durable goods (Index)	Mar. 152.6	150.6	+2.1	+4.1
Iron & steel products	Mar. 146.0	145.4	+2.6	+5.5
Primary iron & steel	Mar. 186.5	184.1	+3.4	+23.7
From mines (Index)	Mar. 251.5	259.3	—1.1	+6.2
Metals	Mar. 196.9	208.0	+4.1	+5.3
Nonferrous smelting, refining	Mar. 160.4	153.4	+11.3	+9.9
Gold	Mar 109.4	112.8	—0.4	—0.3
—From farms				
•Cattle delivered (000)	Apr. 136	176	—2.2	+1.5
•Hogs graded (000)	Apr. 555	689	+1.3	—19.3
Grain mill products (Index)	Mar. 129.8	125.8	+5.1	+1.6
—From sea				
East Coast catch ($000)	Apr. 2,340	1,689	+51.6	—27.1
West Coast catch ($000)	Apr. 762	250	+25.1	—4.2
—From forests				
Newsprint (000 tons)	Apr. 547	575	+2.4	+2.2
Pulp (000 tons)	Apr. 905	968	+1.8	+1.5
—In powerhouses				
Electricity (million kwh.)	Apr. 9,411	10,059	—0.2	+9.3
WHAT WE SELL—				
Retail sales ($ millions)	Mar. 1,267	1,118	+9.1	+0.5
•Dept. store sales ($ millions)	Apr. 116.5	101.8	+32.5	+7.2
Wholesale sales ($ millions)	Mar. 765	678	+23.6	+8.4
Mfrs. outstdg. orders ($ millions)	Mar. 2,193	2,205	—1.5	+10.0
Pass. car sales (units)	Mar. 43,344	34,162	+59.7	+4.9
WHAT'S ON HAND—				
Mfrs. inventories ($ millions)	Mar. 4,494	4,482	+2.0	+2.6
•Dept. store stock sales ratio	Apr. 2.8	3.1	—17.6	....
SPENDING, SAVING POWER—				
•Labor income ($ millions)	Mar. 1,462	1,461	+0.2	+4.5
Dividends payts. (Index) (annual rate)	May 319.5	318.4	+0.4	+7.1
JOBS—				
Persons with jobs (000)	Apr. 5,742	5,668	+1.4	+1.4
Jobless seeking work (000)	Apr. 517	566	—6.8	+16.2
Do. (% of labor force)	Apr. 8.3	9.1	—6.7	+13.7
CONSTRUCTION—				
Contract awards ($ millions)	May 301	399	+60.1	—13.5
FOREIGN TRADE—				
Exports ($ millions)	Apr. 389	440	—14.2	—8.3
•Imports ($ millions)	Apr. 477	476	+8.1	—7.8
MONEY—				
Money supply ($ millions)*	Mar. 12,684	12,501	+1.0	—0.7
Cheques cashed ($ millions)	Mar. 22,754	22,046	+8.5	+12.3
Life insurance sales ($ millions)	Mar. 510	562	+17.0	+0.2
Notice deposits ($ millions)	Mar. 7,613	7,555	+1.3	—1.4
Current public loans ($ millions)	Mar. 6,011‡	6,046	—0.8	+3.9
PRICES—				
Consumer prices (Index)	May 127.4	127.5	+0.4	+1.4
Wholesale prices (Index)	May 231.3	231.3	+0.7	....

*Total deposits, less Govt. of Canada deposits, less float, plus notes in circulation outside the banking system. ‡Preliminary.

STRATEGIC MATERIALS—Production and Supply—

	Latest Month	Month yr. ago	Yr. to date	% chge. yr. to date
Steel ingots and castings (000 tons)	Mar. 398	476	1,717.4	+25.0
Nickel (000 tons)	Mar 17.8	14.9	51.6	+44.9
Primary copper (000 tons)	Mar. 38.3	32.4	110.6	+29.9
Lumber exports (million fbm.)	Feb. 334	277	647.0	+22.5
Lumber (millions fbm.)	Feb. 680	614	1,249	+5.7

•New item this week.
Index based: production 1949=100; consumer price index 1949=100; wholesale price index 1935-39=100.

Look For It Here

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Baie Comeau To Be World Grain Port

MONTREAL (Staff) — A brand-new Canadian deep-sea grain port may be operating within a few weeks.

Baie Comeau — pulp, paper and aluminum centre on the lower St. Lawrence below Quebec City—expects to see a start soon in operations of the big **Cargill Grain Co.** storage complex.

The port will have one of the largest grain storage capacities in Canada—11.8 million bu.

Speculation on its probable business has ranged around 50 million bu. to 80 million bu. annually—also very large totals. Both U. S. and Canadian grain will move through the port.

Like the other major industries at Baie Comeau it will depend heavily upon year-'round harbor operation, which is regarded as assured.

The economy of grain shipment through Baie Comeau is based upon the possibility of an integrated trans-shipment business.

Lakers would bring grain to the port and return inland with aluminum, iron and paper.

Ocean-going vessels would go overseas with grain and iron and arrive in the region carrying alumina.

Argus Corp. Net Up 12%

Net income of **Argus Corp.**, Toronto, for the six months ended May 31, 1960, was $1,520,855 (80c per common share), 12% above $1,357,741 (72c) in comparable 1958-59 period.

Indicated asset value per common share was $41.20 at May 31, compared with $62.89 a year ago, President E. P. Taylor says.

Income from investments amounted to $1,880,666 in latest period ($1,712,692 last year). Earned surplus increased by $197,965 to $6,308,024 at May 31.

Investments with market value of $90,309,149 were carried at cost of $54,421,562.

Holdings of **Canadian Breweries** were increased by 80,000 shares to 480,000 under recent rights offering. Investment in **Standard Radio** (107,499 shares) appears for first time in schedule of securities owned.

Outstanding Argus $2.40 cumulative convertible preference shares, series A, will be redeemed July 14, at $52.50 per share, plus accrued dividend. Recent market price: $55¼.

They are convertible into common stock at rate of two common for each preference share held until July 11.

There were 17,724 series A shares outstanding at May 31.

ANNOUNCEMENT

CANADA PACKERS LIMITED

J. D. A. EVERS

W. F. McLean, President of Canada Packers Limited, announces the appointment of J. D. A. Evers as Secretary-Treasurer of the Company. Mr. Evers has been Secretary and Assistant Treasurer.

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How 'State Medicine' Works for U.K. MD's

It's expensive, and there are still dissenters, but doctors and patients generally say 'Well it's here' . . .

How does "state medicine" work out for physicians and surgeons in Britain?

The subject has become of intense interest for medical men in Canada, because of the Douglas victory last week in Saskatchewan.

Premier Douglas says he hopes his plan will be working by 1962. The Saskatchewan doctors say they will now intensify their fight against it.

Herewith a report on the British situation specially written for **FP** in consultation with spokesmen in the profession.

Special Correspondence

LONDON, England — The U. K. National Health Service arrives at its 12th birthday July 5.

Introduced by the postwar Labor government under Mr. (now Earl) Attlee, it has been perpetuated by successive Conservative governments since 1951.

It is now an integral part of the national life, though there are still some misgivings about it both inside and outside the medical profession.

The annual cost, including ministry expenditure, is about £617 million ($1,697 million at $2.75 to the pound), about 11.5% of the total estimated ordinary expenditure in the U. K. budget for 1960-61.

It is financed partly from the weekly contributions of insured workers, but mainly out of taxation.

Parallel with it is the National Insurance scheme which provides, among other things, sickness benefit for people temporarily unable to work.

Benefits include comprehensive medical and hospital service for people of all ages and income.

At one time prescribed medicines were also provided free, but there is now a charge of one shilling an item (about 14c).

Except for a small minority, all U. K. medical men are employed directly or indirectly under the NHS.

There are about 46,000 working doctors in the U. K., of whom 23,000 are in general practice.

Of the remainder, 19,000 are employed in, or attached to, hospitals and there are 3,500 to 4,000 medical officers of health of various grades.

There is nothing in the NHS rules which precludes a doctor from having private patients — if he can find them. Specialists and consultants, of course, do good business at good fees.

In fact, the number of doctors in purely private practice has been declining and is believed at present to be no more than 600 to 700.

Many GPs working under the health service have a proportion of private fee-paying patients, but in most cases such patients are probably a minority.

The maximum number of patients that a single-handed doctor in general practice may have under the NHS is 3,500, but the national average is about 2,200.

Some medical men feel that the maximum of 3,500 is too high and there has been some agitation to have this figure reduced, but this would, of course, require more doctors.

The main representative body for doctors in the U. K. is the British Medical Association, which includes in its membership about 80% of doctors in all branches of the services.

In spite of the heavy cost of the health scheme there has been long controversy over the question of doctors' pay.

When the service came into operation the pay of general practitioners was fixed according to a formula which can be briefly expressed as 1939 plus 80%.

In view of the sharp rise in the cost of living during the war years and after, there was widespread dissatisfaction with this basis and in 1952 the formula was up-graded to 1939 plus 100%.

This meant in effect that the net annual pay for family doctors was made up to an average of about £2,222 ($6,110) net after practice expenses.

The cost of living continued to rise and unrest again developed, so much so that in 1957 there was a threat by the doctors to withdraw from the scheme unless their pay was improved.

This crisis led to the appointment of a royal commission under industrialist Sir Harry Pilkington. It reported February of this year.

The commission has recommended pay increases for more than 40,000 hospital and family doctors in the NHS. For doctors in general practice an advance of nearly £9 a week on their 1955-56 average earnings is proposed.

Since those years, however, there have been two interim increases which will reduce the rise now suggested to about £5 a week, the new annual average being £2,690 ($7,400).

The Pilkington award has been accepted by both the government and the medical profession and it is expected that it will be implemented soon.

Although the new basis of pay has not met with the unqualified approval of all doctors, one of the main bones of contention in their relationship with the NHS has now been removed.

Pay of GPs is worked out on a capitation basis. They receive at present a yearly fee of 18/- for each patient on their list, well or ill.

For patients 501 to 1,500 there is a loading of 12/-, making the total fee for these patients 30/-.

Doctors have their own superannuation scheme, of which they share the cost with the government.

Contributions amount to 6% of salary from the GP and 8% from the employing authority.

Although some of the older doctors feel that their profession has lost face with the community, the NHS is now accepted as a permanent reality by the great majority of GPs.

As for the patients, the general reaction is expressed in the comment: "Nowadays no-one needs to be afraid to be ill."

Apart from free medical advice, the patient is also assured of free hospital treatment, unless he wants to pay for a so-called hospital amenity bed. This means a private room with the same treatment. Urgent cases get priority.

It provides for both pre- and post-natal care of expectant mothers. In the case of a difficult birth, the mother gets full medical and hospital facilities.

Also provided are anti-polio injections, mass - radiography and immunization of children against diphtheria and smallpox.

Dental and optical treatment also come within the scope of the NHS, but a patient must pay a proportion of the cost of dentures and spectacles and must also pay a fee of not more than 20/- for fillings and extractions. There is a separate basis for dentists' pay.

The socialist administration which introduced the service conceived the idea of national health centres, in which a full range of medical and dental treatment would be provided under one roof.

These have never really caught on.

A more common development has been that of group practices in which a small number of GPs, possibly five or six, band together, sharing the same working premises and secretarial facilities.

There is thus a saving in staff and overhead, and, from the patients' viewpoint, a range of medical skills in one place. The Ministry of Health will provide interest-free loans for the development of premises for approved groups.

A doctor is not obliged to take any particular patient onto his books and a patient can choose his own doctor.

A patient may change to another GP if he wishes but if a doctor wants to divest himself of a patient he has to treat him until such time as a transfer can be arranged.

The NHS has put an end to the system of buying and selling practices.

It has also helped stop the trend of doctors congregating in rich areas, rather than where the needs of the community are greatest.

When the service was introduced, a fund was set up to provide compensation for doctors who had bought their practices, but they can only draw their share when they retire.

Distribution of doctors now comes under the general surveillance of the health authorities.

In practice, appointments are usually effected either through personal contact or through advertisements in the medical journals.

The most usual way for an aspiring family doctor to begin his career is as an assistant to an established GP.

He will be paid by the GP on a salary basis, at a rate of about £1,100 to £1,200 a year. Normally, he would be about 26 years of age.

There is no fixed retiring age under the NHS, but a doctor must practice for 10 years before he can qualify for a pension.

It is a hard-worked profession and doctors are not especially long-lived. Their peak earning period is usually between the ages of 45 and 50.

For the GP it has meant more paper work, more "routine".

In the early days of the service there was much talk of patients "camping out" in the waiting rooms and calling in doctors for trivial or imagined complaints. But medical spokesmen today say this kind of abuse is not serious.

One GP told **FP**:

"We still get a few malingerers, but most of our patients play the game pretty well."

Any final assessment of how doctors have fared under the National Health Service is complicated by the very sharp rise in the cost of living which has occurred in the U. K. and elsewhere over the last 20 years.

It is generally accepted that the cost of living in the U. K. is now treble what it was in the immediate pre-war period.

On this basis, doctors' average pay would seem to be relatively rather worse than it was in 1939, but the same could also be said of many other groups of professional and "white-collar" workers.

One point to remember about present attitudes:

Broadly speaking, no U. K. doctor under the age of 37 has had any working experience except within the general orbit of the national schema.

Report 10% Rate Increase In Ontario

An announcement is expected next week on rates charged by the Ontario Hospital Services Commission.

Rumors are that an increase in rates of 10% may be in the offing.

Premier Frost hinted earlier that administrative costs were rising 8% annually.

But at midweek, David W. Ogilvie, the commission's general manager, would only say:

"The matter of premiums is receiving close attention."

The commission reported a $3 million surplus on a $162 million income for 1959, the first year's operation of the government-sponsored plan.

There is no uniform pattern for financing the national hospital insurance plan other than the federal contribution of roughly 50%.

Here's how the provinces finance their plans:

- **British Columbia:** levies a 2% provincial sales tax.
- **Alberta:** Pays part from revenue, part through a mill rate levied on property, plus a small daily charge based on time spent in hospital.
- **Saskatchewan:** Hospitalization tax of $17.50 a year for a single person and $35 a year for a family.
- **Manitoba:** Premium of $36 a year for a single person and $72 a year for a family. Manitoba is the only province so far, to increase its premiums since the national plan started in 1959.
- **Ontario:** Premium of $25.20 single, $50.20 family a year.
- **Nova Scotia:** Levies a 3% sales tax.
- **New Brunswick:** Premium of $25.20 single and $50.40 family per year.
- **Prince Edward Island:** Premium of $24 single and $48 family a year.
- **Newfoundland:** Pays its whole bill from general revenues of the province.

Manitoba Hospital Plan Raises Rates

A 50% increase in premiums will take care of anticipated rising costs . . .

From Our Own Correspondent

WINNIPEG — Faced with an estimated $1.8 million deficit for 1960, premium rates for Manitoba's Hospital Services Plan are being increased nearly 50%.

Higher rates will be effective from Jan. 1, 1961.

The plan operated in 1959 with a surplus of $174,125.

A preliminary survey showed costs for 1960 likely to be far above last year, perhaps between $3 and $4 million, because of more subscribers, greater utilization of hospital services, and higher cost of providing them.

For single persons the present premium of $2.05 a month is being raised to $3 a month.

The family rate of $4.10 a month will be increased to $6 a month.

The new rates will be far more than enough to take care of this year's estimated deficit.

They will produce about $6 million additional revenue.

At the end of March the plan had 139,506 single premium payers. At the new rates this group will be paying $1.6 million more in 1961.

There were 193,822 family premium payers who at the new rates will be paying $4.4 million more than in 1961.

Decision to increase premiums higher than necessary to take care of the expected 1960 deficit was because costs are expected to be still higher in 1961 and two or three years after.

To keep the plan solvent rates had to be fixed high enough, administrators said, to put the plan on a stable basis and avoid having to make another increase a year or two hence.

Some of the surplus, if any, will be diverted to a stabilization fund to cake care of possible deficits in the future.

The figures of registrants paying premiums do not include 5,208 in the RCMP and armed services with more than one dependent.

For this group rates have been three fourths of the regular family rate because they are partly protected under federal government plans.

The Manitoba Hospital Services Plan became effective July 1, 1958. At the end of June it will have completed two years' operation.

For the first six-month period, July 1 to Dec. 31, 1958, only registration was required to qualify for benefits.

About 99% of the population registered. During 1959 payment of premiums was required. This didn't cause any drop in the number eligible for benefits. At present about 99.5% of the population has protection.

By end of this year there will have been additions of 386 active treatment beds and 450 chronic case beds since the plan started two years ago.

Within the next three years the province expects to add about 1,000 beds to hospital facilities.

Costs of administration have been less than of income. Revenue in 1959 was $27.2 million, which included $12.8 million net premium income from registrants, $11.24 million from the Government of Canada; $3.072 million in a grant from the Manitoba government; and some small miscellaneous items.

Expenditures in 1959 were $27.04 million of which 95.6% was cost of insured services.

The claims division processed for payment 170,000 in-patient claims and 36,000 out-patient claims received from Manitoba hospitals. Another 3,500 claims were received from hospitals outside Manitoba.

NEW ENGINES

Three new units have been added to **International Harvester Co. of Canada's** line of six-cylinder carbureted engines. The new engines feature downdraft carburetion with velocity governor and have higher horsepower ratings than current International models of the same displacement.

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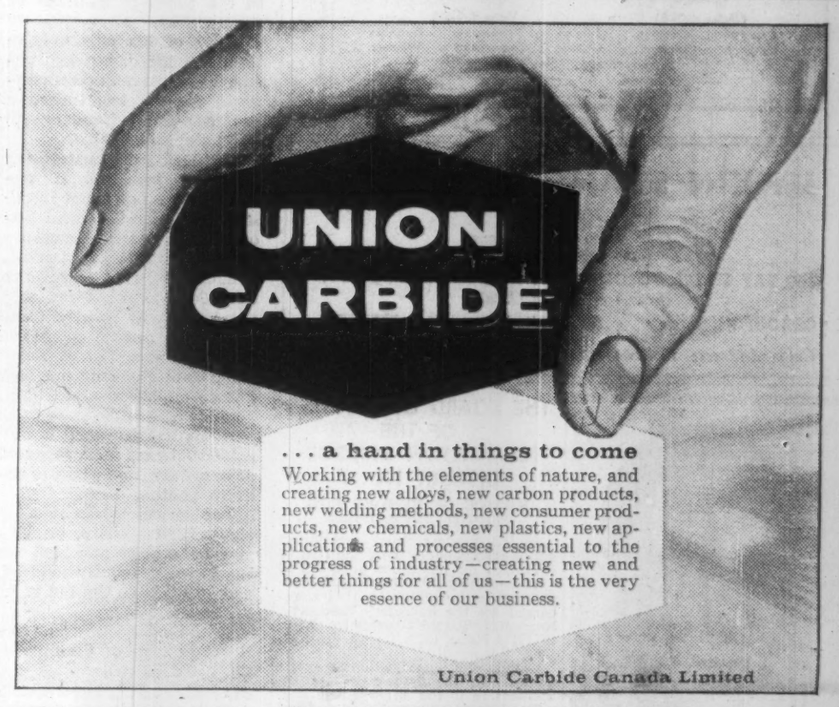

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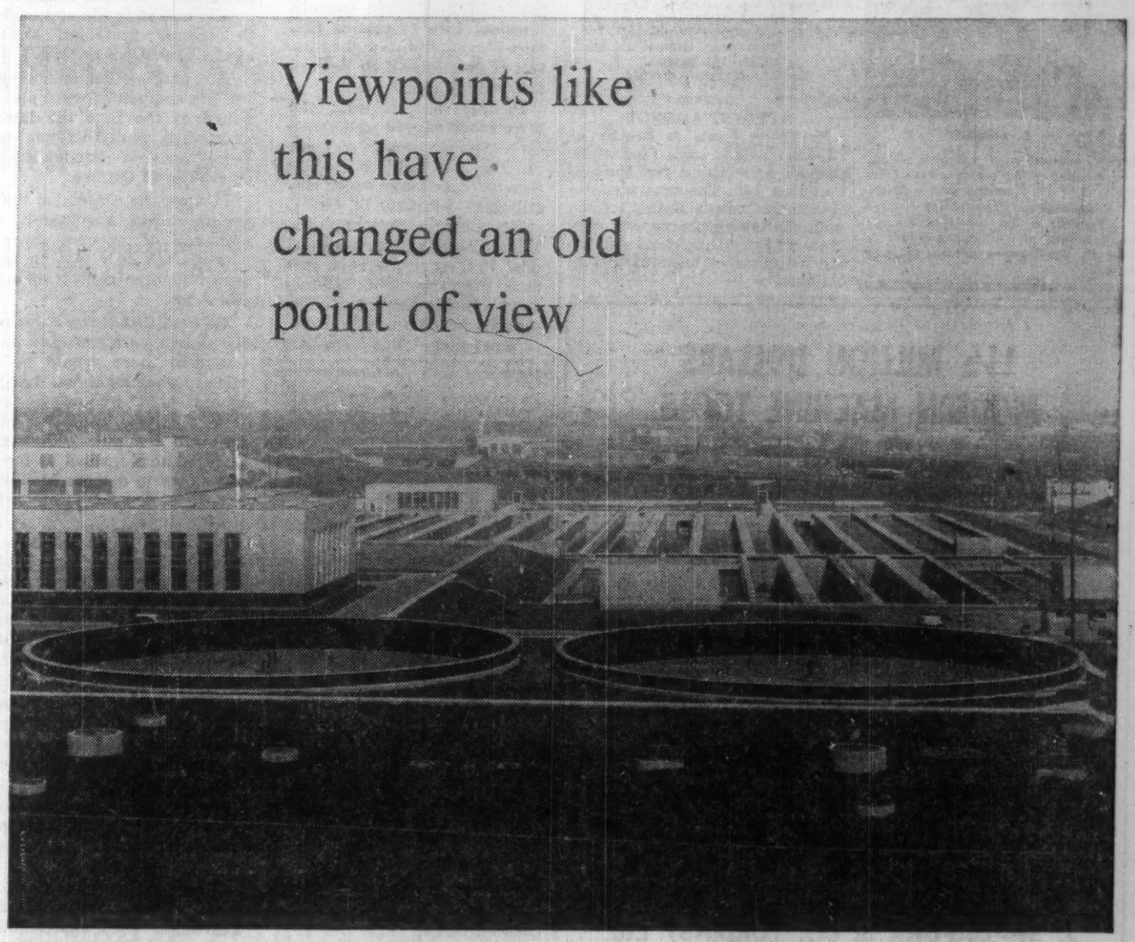

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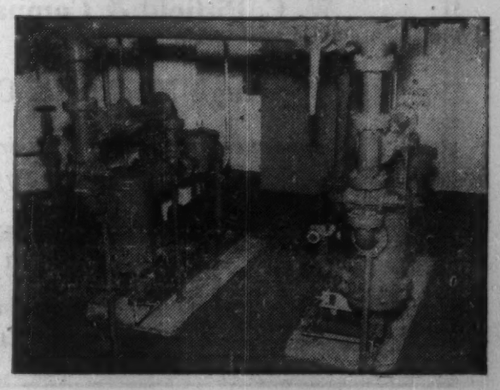

Only a Week Left

to Exercise, Buy or Sell

Royal Bank "Rights"

Up to and including June 27th holders of Royal Bank of Canada Rights may subscribe for one share of the Bank's Capital Stock at $41.50 per share for every ten Rights held.

After June 27th the Rights cease to have any value, so immediate action should be taken to exercise or sell them.

We believe it is in the interests of shareholders to exercise their Rights without delay.

Investors not now holding Rights may purchase them through us and subscribe for the new Capital Stock of Canada's largest bank on the same basis as present shareholders. Payment may be in 10 equal monthly instalments commencing June 27th.

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Canadian Life Firms Sold

Canadian Life Companies Recently Acquired By Foreign Concerns

Company	Purchaser	Date	Price Offered Per Share $	% Stock Initially Acquired %	Market Price at Time of Offer $	Premium Over Market Price %
Excelsior Life	Aetna Life	1960	300	70	200	50
National Life	Glens Falls Ins. Co.	1958	450	45	300	50
Dominion Life	Lincoln National	1957	1,975	majority	1,550	27
Western Life	H.P. Skoglund et al	1956	120-130	75	90-95	33
Commercial Life	N.V. Netherlands Life	1956	52*	majority	22	136

*Original offer was $44 per share, subsequently raised to $52 to top competitive bid.

INVESTMENTS

Why You're Missing a Bet In Life Insurance Stocks

By PAUL S. DEACON

LESTER T. MILLER of Cleveland, partner in the investment firm of **Joseph, Mellen & Miller Inc.**, is enthusiastic about Canadian life insurance stocks.

For years, he has tried to generate interest among Canadian investment men, as well as among his own clients, in the profit possibilities of these stocks.

Many of his clients have been convinced, but in Canada the investment community in general has turned a deaf ear and a blind eye to his estimates of value.

This lack of interest among Canadian investors is undoubtedly a key factor in the shift of control of still another Canadian life insurance company to foreign investors.

Excelsior Life Insurance Co., Toronto, a 70-year-old company, will shortly come under the control of **Aetna Life Insurance Co.** of Hartford, Conn., one of the best known U.S. companies (**FP**, June 11).

Aetna has arranged to buy a 55% interest for a reported $5¼ million, and plans to acquire another 15%.

The price works out to about $300 a share, or 50% above the price at which the stock was recently offered, and 75% above the bid prior to the offer.

In the sale, Miller and the Hartford firm of **Conning & Co.** acted as negotiators and advisers.

Miller acted in a similar capacity in 1957 when **Lincoln National Life Insurance Co.,** Fort Wayne, Ind., bought control of **Dominion Life Assurance Co.,** Waterloo, Ont.

In this case as well, the price received was well above the earlier market price ($1,975 vs. $1,550 before rumors of a change began circulating—**FP**, Jan. 19, 1957).

Yet Lincoln National considered it was getting a good deal at the price it paid, just as Aetna presumably regards as reasonable the terms of its present purchase.

What makes life insurance stocks sell for such a discount below their level in a buyout?

Undoubtedly one reason is that in a bid for a controlling block of any company, the buyer is usually willing to pay more than the going price.

Miller feels that another reason is the lack of awareness among investors here as to the real potential in life company shares.

They look at the small yield, and they look in vain for net profit figures, and conclude that the shares are either much too high-priced (on the basis of yield) or incapable of valuation (because there are no net profit figures in the financial statements).

It was because of this apparent mystery surrounding life insurance stock valuation that **FP** asked Miller three years ago to write a special article outlining his approach to valuing Canadian life stocks (**FP**, Dec. 14, 1957).

This and another article on the life companies were published at the time the laws governing mutualization of these firms was under consideration in Ottawa.

In these, he contended that mutualization (purchase by a company of its own stock) was not the only way to assure Canadian control of our life firms.

He held that if the value of the shares were probably understood, there should be a wide market for them. Large blocks held by estates or family groups could be offered to the public through underwriters instead of having either to dispose of them to foreign firms or to mutualize.

Although earnings have continued to grow, and dividends have increased, the market value of shares of companies that did not follow the mutualization route has tended to move downward rather than up.

By Miller's calculations (see table), furthermore, Canadian life stocks still look very cheap compared to their counterparts in the U.S.

Some analysts do not agree with the Miller calculations, although they are on a basis widely used in the U.S.

One, for instance, contends that $200 per share would represent the approximate value of Excelsior shares, rather than the $300 (approximate) expected to be offered by Aetna.

He says that, based on the last three years' earnings, if the minimum reserves and margin requirements as required by law and the federal department of insurance were set up, Excelsior earned enough to pay $6 a share in dividends compared with the $1.60 actually paid.

But an active life insurance company or any other going concern cannot pay out the whole of its earnings. Thus a dividend of 50% of this amount, or $3 a share, would be more realistic, he contends. This would provide a yield of only 1% on the $300 purchase price.

His $200 estimate of value is based on a value of $15-$20 per $1,000 on non-participating business in force; $7.50-$10 per $1,000 on term business; and $1.50 on participating business, depending on the rates used by the company.

To this is added the capital and shareholders' proportion of "voluntary" reserves and excess market value of its assets.

Miller calculates earnings on the basis of the proportion of participating business allowed by law, plus earnings from non-participating business (in which policyholders have no interest), plus an adjustment for the increased value of life insurance on the books.

This adjustment is $15 per $1,000 of ordinary life insurance, $5 per $1,000 of group life insurance, and 50% of the increase in the weekly debit for industrial insurance if the policies are non-participating.

For participating insurance, 10% or less of these adjustments are made, depending on the proportion of participating profits distributable by that company under insurance laws.

No matter how values are calculated, it's clear from the Miller tables that in relative terms at least, our life stocks are selling for much less than those in the U.S. and are of obvious interest to U.S. companies seeking a broader business in Canada.

Interest is not confined to the U.S. either. In recent years, control of Continental went to Swiss interests, Commercial to a Netherlands company, Fidelity to British interests. U.S. firms have gained control of Western and National.

Canadian life firms are prevented by law from buying an interest larger than 30% in another company of any kind, and cannot buy any shares at all of another life insurance company.

The only time they have to consider the problem of value is when they start calculating prices for a mutualization move.

Sale of large blocks in the past has arisen frequently from the desire of small family groups or estates to dispose of their shares. They can't get the price they want on the open market, because most investors don't want to accept the small return and the uncertain market performance.

Their only alternative has been to sell to those who recognize value — other life firms outside Canada — if they don't want to follow the mutualization route.

Aetna is leaving 30% of Excelsior's stock in the hands of the public. It is understood to be planning to centralize all its Canadian operations in the Canadian firm, giving Excelsior a broad range of insurance and giving Aetna a ready-made life insurance sales force (its main business in Canada has been group insurance).

The shareholder list in the past has been small (about 70), with the Matthews family and associates holding control.

Insurance men and investment men will watch closely the future performance under the new regime, and the extent of Canadian participation in the minority shares still available.

How Life Stocks Compare

Company	Recent Price Per Share	1959 Adjusted Asset Value $ Per Share	1959 Adjusted Earnings $ Per Share	Indicated Dividend $ Per Share	Price-Earnings Ratio	Yield %
U. S. Stocks						
Aetna Life	88½	82.33	6.04	1.40	14.6	1.6
Connecticut Gen.	367	222.81	21.35	2.40	17.6	0.6
Lincoln National	236	186.84	16.62	2.00	14.2	0.8
Nat. Life & Acc.	103	70.99	6.83	.60	15.1	0.6
Travelers Ins.	87	83.69	6.29	1.40	13.8	1.6
U. S. average					15.1	1.0
Canadian Stocks						
Crown Life	186	354.26	45.58	3.20	4.1	1.7
Great-West Life	325	550.02	75.90	5.00	4.3	1.5
Imperial Life	77	139.74	12.89	2.40	3.2	3.1
Canadian average					3.9	2.1

Canadian figures furnished by Joseph, Mellen & Miller Inc., Cleveland.
U. S. figures furnished by The First Boston Corporation, New York.

Firearms Firm Plans Stock Sale

First public offering of stock of **North American Arms Corp.,** Toronto, will likely be made before the end of July.

FP is told that the offering will probably consist of not more than 50,000 common shares. Price is expected to be between $5.50 and $6 per share.

The issue will be handled by a Toronto investment house.

North American Arms was formed about a year ago as a public company. It is controlled by Canadian interests.

Company manufactures rifles and shotguns. Trademark is "Naaco".

The BNS — Outstanding Growth

The Bank of Nova Scotia is offering to its shareholders the right to purchase at $42 one additional share of capital stock for each four shares held on June 10, 1960.

Shares paid for by June 30 will entitle the holder to the full amount of the quarterly dividend of 55¢ per share payable August 1, 1960. Regular dividends paid in 1959 aggregated $2.15 per share and there was in addition an "extra" of 10 cents per share paid in that year.

During the past ten years net earnings of the Bank available for dividends have increased over 155%, and in the year ended October 31, 1959 increased by 12½% over the previous year.

We suggest that shareholders subscribe by June 30, 1960 for the additional shares to which they are entitled at this favourable price of $42 per share. The present market price of the shares is about $59.50 per share.

Our services are available to facilitate the exercising of rights or for the purchase or sale of rights. We will be pleased to forward on request a pamphlet prepared in connection with this offer.

Wood, Gundy & Company
Limited

Toronto, Montreal, Winnipeg, Vancouver, Halifax, Quebec, Kitchener, London, Hamilton, Ottawa, Regina, Edmonton, Calgary, Victoria, London, Eng., New York

JENKIN EVANS & CO., LTD.

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ANNOUNCEMENT

W. D. KENNEDY

Recently named chief economic adviser and member of top management of B.C. Hydro is W. D. Kennedy, former director of Crippen-Wright Engineering Limited. Mr. Kennedy is the author of the economic aspects of the Crippen-Wright report on development of the Columbia River.

THE BOARD OF TRUSTEES OF THE EDMONTON SCHOOL DISTRICT NO. 7

NOTICE OF TENDER FOR SCHOOL APPRAISALS

Sealed tenders from recognized appraisal firms covering the cost of valuation for insurance purposes of approximately 80 schools and miscellaneous buildings, will be received by the Secretary-Treasurer, Edmonton School District No. 7, up to 12:00 Noon (M.S.T.) on July 11, 1960.

Details and specifications may be obtained for the above contract upon application to the undersigned.

The lowest, or any tender will not necessarily be accepted.

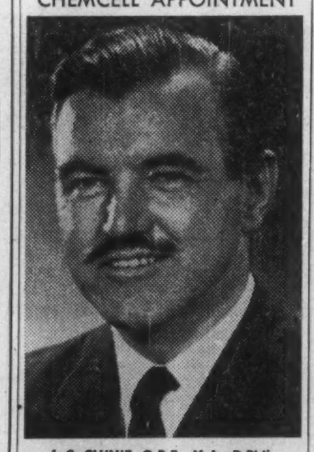
T. W. MEEN,
Secretary-Treasurer,
Edmonton School District,
10733 - 101 Street,
Edmonton, Alberta.

APPOINT AGENCY

Needham, Louis & Brorby of Canada will handle industrial product advertising for **Massey-Ferguson Ltd.** The firm plans to broaden its industrial distribution, with continuing program to integrate all North American marketing activities at headquarters in Toronto.

ANNOUNCEMENT

CHEMCELL APPOINTMENT



J. C. CLUNIE, O.B.E., M.A., D.Phil.

The appointment of John C. Clunie as Manager, product development department, is announced by Canadian Chemical Company, Limited.

Dr. Clunie joined Canadian Chemical Company in 1956 and spent two years in the company's research laboratory at Edmonton as a group leader. He moved to Montreal in 1958 as assistant to the president of Chemcell Limited which position he held until his new appointment.

1½ MILLION DOLLARS MODERN MACHINE TOOLS

FORMERLY OF THE

BAWDEN INDUSTRIES LTD.

★ Boring Machines ★ Lathes ★ Milling Machines ★ Planers ★ Punch Presses ★ Shapers ★ Radial Drills ★ Grinders ★ Overhead Cranes ★ Jig Borer ★ Welders ★ Hydrant Mfg. Division ★ Punch Press Mfg. Division ★ Air Compressors ★ Complete Foundry ★ Woodworking Plant ★ Precision Tools ★ Stake-Panel Trucks ★ Factory Equipment ★ Fine Office Furniture and Equipment ★

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AUCTION

TIME
WEDNESDAY, JUNE 22ND
1960 AT 10.00 A.M.

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TORONTO, ONTARIO

INSPECTION: Daily from 9:00 a.m. to 5:00 p.m. until morning of sale.

FOR INFORMATION AND FREE CATALOGUE: Phone, write or wire the offices of the Auctioneers

J. SPADAFORA & CO. (Ontario) Ltd.
CANADA'S LARGEST NATION-WIDE AUCTIONEERS

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119 Adelaide Street West
EMpire 2-1221

MONTREAL, QUEBEC
455 Craig Street West
UNiversity 6-2965

TERMS: Cash or certified cheque and as per posted conditions of sale.

W. C. Pitfield & Company, Limited
and
Hugh Mackay & Company

announce the moving of their Toronto offices on Monday, June 13th to

366 BAY STREET
TORONTO, 1

The telephone number remains unchanged at
EMpire 3-6144

OFFICE SPACE AVAILABLE
In the business heart of Toronto
THE ROYAL BANK BUILDING
KING AND YONGE STREETS
COMPLETE UPPER FLOOR 6,778 SQ. FT.
AVAILABLE IN OCTOBER
A distinguished downtown address
Air Conditioning Available • Inside Parking Nearby
Enquiries: REAL ESTATE DEPARTMENT
CHARTERED TRUST COMPANY
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ANNOUNCEMENT

BRUNSWICK OF CANADA APPOINTMENTS

R. H. BENNETT

C. O. CAMPBELL

Brunswick of Canada, Dixie, Ont., has announced the appointment of R. H. Bennett as President and C. O. Campbell as Vice President in charge of Marketing. Mr. Bennett has been Vice President and General Manager of the company since 1951 and responsible for operations concerned with expansion into plastics, Fiberglas boats, automation equipment for bowling lanes and school furniture and gymnasium equipment. He is a Business and Engineering graduate of the Massachusetts Institute of Technology. Mr. Campbell joined Brunswick in 1948 as Merchandising Manager. He has been General Sales Manager since 1951. As Vice President he will be responsible for the complete marketing operations of the company's marine, school equipment, and Bowling and Billiard Divisions.

I SELL GOOD ADVICE ON THE STOCK MARKET

Send $5.00 to me and I will airmail to you my latest list of the 10 best buys of American and Canadian Securities.

MELVIN SCHAENGOLD, LL.B.
Market Analyst
500-502 Keith Bldg.
Cincinnati 2, Ohio, SEC Registered.

NINETIETH ANNIVERSARY YEAR • 1870-1960 •

Our 90th ANNIVERSARY YEAR

Commemorating this event, we have just published
"A TEN YEAR INVESTMENT FORECAST
1960-1970"

This research work examines the background for investment opportunities in the next decade and discusses nine industries likely to show superior growth.

DOMINICK & DOMINICK
Members New York, American and Toronto Stock Exchanges
14 WALL STREET, NEW YORK 5
Dominick Corporation of Canada: 360 St. James Street West, Montreal

ROYAL BANK RIGHTS

Expire June 27

We recommend they be exercised without delay

Please Contact

NESBITT, THOMSON
AND COMPANY, LIMITED

960A

The Directors of
INDEPENDENT COAL AND LUMBER COMPANY LIMITED
MAHONEY & RICH LIMITED
and
SAYBROOK CONSTRUCTION COMPANY LIMITED
announce that as a result of meetings recently held, the following Directors and Officers were elected:
CLIFFORD J. MAHONEY — President
E. DEANS BERRY — Director
JOSEPH C. MAHONEY — Secretary-Treasurer

Aluminium May Start U. S. Secondary Plant

MONTREAL (Staff) — Canada's **Aluminium Ltd.** will have to consider new moves in its attempts to diversify in the huge U. S. market.

An $11 million bid by the Canadian ingot producer to get into the U. S. secondary smelting business has been blocked by Justice Department trust-busters.

Apparently the U. S. didn't want any primary producer buying up secondary smelters. It probably feared a rash of such purchases, if the Aluminium Ltd. deal to buy **Apex Smelting** of Chicago (**FP**, Jan. 2) had gone through.

But the way may still be clear for primary producers to set up their own secondary operations, rather than buying existing companies.

Considering the many advantages which Aluminium Ltd. expected through purchase of Apex, observers now think the Canadian company will consider such a move.

With the large U. S. producers very expansion-minded both in domestic and international markets, Aluminium Ltd. obviously doesn't want to miss a bet in the fight for the fast-growing aluminum market.

Its proposed purchase of Apex was announced late last year. It involved acquisition of assets (including three secondary smelting plants) in return for about 340,000 Aluminium Ltd. shares then as now, worth more than $30 each.

These advantages were foreseen:

- **The Canadian firm could** make deals to supply ingot to U. S. fabricators and buy back scrap, a particularly effective sales method in time of price-cutting.
- **It could sell secondary metal** to the auto industry, a big buyer.
- **And, of course, it could supply Apex's need** for primary metal.

If Aluminium Ltd. should set up its own secondary company in the U. S. it could continue to seek these advantages.

The industry is watching the company closely for any signs of movement in this direction.

Ont. Accountants Meet Next Week

Ontario chartered accountants will meet at Queen's University, Kingston, June 20-21 for the annual conference of the Institute of Chartered Accountants of Ontario.

Taxation, management controls, auditing practices and educational requirements for the profession will be discussed.

A panel of medical doctors will discuss the question of health in professional life, the stresses and strains of a fast-paced era

President of the institute, which has 3,647 members, is R. B. Dale-Harris, FCA, of Toronto. Membership has increased by more than 50% in last five years.

G. H. Cowperthwaite, CA, of Toronto, is chairman of the program committee.

Note

SIGNS OF easier money in the U. S. and stronger bond markets there continue to push up Canadian bond prices.

For instance, the Government of Canada 3¾% bonds due 1978 were selling this week on 5.14% yield basis, compared with 5.22% June 1. Canada 3% bonds due May 1961 were yielding only 3.32% compared with 3.54% just two weeks earlier.

* * *

Bank of Nova Scotia shareholders of record June 10 are being offered one new share at $42 for each four held. Recent price: $59¾. This will raise $22.7 million. The shares are underwritten by a group headed by **Wood, Gundy & Co., Harris & Partners** and **Burns Bros. & Denton.**

* * *

A block of 20,000 class A shares of **Thompson & Sutherland Ltd.**, Nova Scotia hardware chain, has been offered by **Easternn Securities Ltd.** at $10.25 per share. Stock being offered was bought from existing shareholders.

* * *

First public stock offering by **North American Arms Corp.**, Toronto, is expected before end of July. **FP** understands that probably not more than 50,000 common shares will be offered, priced at $5.50 to $6 per share. Issue will be handled by a Toronto investment house.

The Royal Bank of Canada

Rights Expire June 27, 1960

We recommend shareholders of the Royal Bank exercise their rights immediately. Rights entitle holders to subscribe for one new share at $41.50 for each ten shares held. Rights expire June 27, 1960.

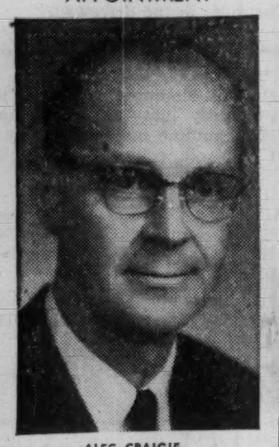
Shares may be paid for in cash or in ten monthly instalments of $4.15 per share. We will be pleased to assist in the exercise of rights, purchase or sale of rights, or shares.

DOMINION SECURITIES CORPN. LIMITED
Established 1901
Toronto Montreal Winnipeg Calgary Edmonton Vancouver Victoria Ottawa Quebec Halifax Saint John Fort William London Kitchener Brantford Hamilton St. Catharines New York London, Eng. Boston
50 King Street West, Toronto — EM. 8-6161

KERNAGHAN & CO. LIMITED
Investment Securities
Canadian National Railway Company 5% Bonds due May 15, 1977
Price 97—to yield 5.27%
2nd Floor, 67 Richmond St. W. EM. 4-4256 TORONTO
Specialists in Special Situations

ANNOUNCEMENT

IMPERIAL BANK APPOINTMENT



ALEC CRAIGIE

Imperial Bank of Canada announces the appointment of Mr. Alec Craigie as Superintendent of Business Development, Head Office, Toronto. Mr. Craigie was previously Imperial Bank's Representative in London, England, and has been succeeded in this position by Mr. H. S. McCuaig, previously Assistant London Representative. Mr. J. V. Cressy, formerly Supervisor, Business Development, has been appointed Manager, Dundas Street and University Avenue Branch, Toronto.

ANNOUNCEMENT

HEADS U. S. COMPANY

J. H. KENT LYONS

J. H. Kent Lyons, president Cerametal Industries Limited, Streetsville, Ont., has been named president, chief executive officer and a director of The Bettinger Corporation, Milford, Mass. Mr. Lyons, who will continue to live in Canada, succeeds Robert A. Weaver, Jr., who has moved up to the new post of chairman of the board. Both companies are manufacturers of cerametal products. Bettinger has licensing agreements with companies around the world. Mr. Weaver remains as chairman of the board of Cerametal Industries Limited.

Why They're Moving

Facts and comment on what's going on in the market and rumors behind some of the moves.

By P. T. DURRANT

SLACKENING demand for basic steel and consequent easing up in production rates are reflected in reduced market prices of the major steel producers' stocks.

Steel ingot output this year to end of May was 15.8% ahead of year earlier figure; however, year-to-year gain in May was less than 2%. According to one industry official, steel consumers appear to be coasting on inventories built up early this year. Demand for steel is expected to rise as these inventories are used up.

Canadian steel mills were operating at 78% of capacity early this month (off from 93% a month earlier). Outlook here is considered somewhat better than in the U. S., where orders for most steel products are still declining. Most U. S. mills expect no appreciable rise in new orders before August.

This is how stocks of the four big steel makers have been trading:—

	Recent price	End of May	—1960 Range— High	Low
	$	$	$	$
Algoma	33	35	40½	32¼
Dom. Foundries	41½	45½	52	42½
Dom. Steel	13½	13⅛	15⅞	12¼
Steel Co. of Can.	73⅜	75½	87¾	70

Softness in market prices extends to the smaller producers and firms engaged in structural steel and allied operations. **Burlington Steel** at mid-week price of $15½ has eased from $16 late in May; **Canada Iron Foundries** at $17¾ is down $2; lightly traded **Canadian Drawn Steel** has given up $3 at $14; **Standard Structural Steel** at $12⅜ is down from $13¼; and **Toronto Iron Works** has slipped $1¾ to $14¼.

* * *

Shares of **Bank of Nova Scotia** climbed $1⅝ to $63⅞ prior to announcement of new rights offering. Later, selling ex-rights, market price dropped to $59¾. Shareholders are being offered right to buy one new share at $42 for each four shares held. Total of 540,000 shares are covered by the offer which expires Sept. 16, 1960. Shares paid for by June 30 will be entitled to full amount of quarterly dividend (55c) payable Aug. 1.

Results of **Dominion Stores** for latest fiscal year were evidently a pleasant surprise for investors. Stock price jumped to a new 1960 high of $55½ from $49 a week ago (mid-week price: $54½). Net profit of $3.73 per share was below previous year's $4.18, but a lot better than indicated by first half results.

Canada Packers class B stock rose $4.50 to $47 on turnover of 25 shares early this week, after moving up from the early June level of $41. The class A stock, which also moves widely on light volume, traded 25 shares at $43 earlier this month, followed by 25 at $46. Year's high for the class A is $48, for the class B, $47½.

Fleetwood Corp. (listed April 11) at recent price of $10 has firmed from its $9¼ low at beginning of this month. High to date: $11⅛. Fleetwood, manufacturer of radio and television sets, became a public company earlier this year (**FP**, March 5). Its stock was offered at $11 a share in March.

First quarter sales were at the same level as a year ago and net income indicates a trend somewhat higher than for last year, president M. F. Pollock reported recently. He said sales were maintained despite a general slackening in the industry as a whole. (According to Dominion Bureau of Statistics, producers' sales of radio and TV sets in first four months' this year were about 12% lower than a year ago.)

Stock of **John Labatt Ltd.** eased to $26¾ early this week from $27½. Price had previously moved up $1 on announcement of increase in quarterly dividend rate—to 32½c per share from 30c.

Canadian Breweries set a new 1960 high ($38) last week, up $1 since beginning of June. Mid-week price: $37¾. Results for the first half of current fiscal year should be available soon. Stock of a subsidiary, **Dow Brewery**, which has traded steadily at $45 this year, moved up briefly to $45¼, then settled back at $45.

Shares of **Canada & Dominion Sugar** dropped to a low of $13½ in heavy trade last week following issuance of company's annual report. Market price had improved to $15½ early this week. Described by company as "disastrous", results for fiscal year ended March 31 showed a net loss of $995,309 vs. $1,494,423 net profit the previous year.

Canadian Stock Exchange suspended trading in shares of **Abitca Corp.** (formerly **Abitca Lumber & Timber Corp.**) pending enquiry into company's affairs. The stock was trading heavily in the 30c-39c range immediately prior to suspension; it had earlier moved up from 28c. It was quoted over-the-counter at 18c bid, 20c asked, at mid-week.

Company's activities are reported to include production of lumber, manufacture of roofing papers and an interest in unproductive oil leases in the U. S.

Coronation Mortgage, Vancouver, has improved steadily in price since mid-May low of $8¾. Shares set a new high for this year ($10½) last week. Volume this month has been heavier than usual. Net profit in six months ended Jan. 31 was 33c per share, up from 25c a year earlier. Company also operates in **Quebec.**

Dividend Changes

THE CONSOLIDATED MINING & SMELTING CO. OF CANADA — Common, 40c plus 10c extra, payable July 15 to holders of record June 17; ex-dividend June 15. This is the first extra declared since an extra of 20c was paid in 1958. Recent price: $187/8.

IMPERIAL BANK OF CANADA—Common, 45c payable Aug. 1 to holders of record June 30; ex-dividend June 28. Total paid or payable to date in 1960, $1.25; total paid to same date in 1959, $1.05; total paid in 1959, $1.45 plus 35c extra. Recent price: $57½.

INDUSTRIAL MORTGAGE & TRUST—Capital, $2.50 payable July 2 to holders of record June 15. Total paid or payable to date in 1960, $4.50 plus $2 extra; total paid to same date in 1959, $4 plus $1 extra. Total paid in 1959, $4 plus $1 extra. Bid: $109.

JOHN LABATT—Common, 32½c payable July 1 to holders of record June 17; ex-dividend June 15. Total paid or payable to date in 1960, 92½c; total paid to same date in 1959, 90c; total paid in 1959, $1.20. Recent price: $27½.

OCEAN CEMENT & SUPPLIES—Common, 7½c payable July 4 to holders of record June 17; ex-dividend June 15. Total paid or payable to date in 1960, 37½c; total paid to same date in 1959, 45c; total paid in 1959, 60c. Recent price: $11⅜.

PROVINCIAL BANK OF CANADA — Common, 30c payable Aug. 1 to holders of record July 15; ex-dividend July 13. Total paid or payable to date in 1960, 80c; total paid to same date in 1959, 60c; total paid in 1959, 85c plus 25c extra. Recent price: $36¼.

ANNOUNCEMENT

MICHAEL D. ECCLES

Mr. C. F. W. Cooper, Managing Director, Josiah Wedgwood & Sons (Canada) Limited, is pleased to announce the appointment of Mr. M. D. Eccles as Sales Manager of the firm, effective June 1st.

In 1956, Mr. Eccles became Brand Manager of Wedgwood's Vancouver Office. He has subsequently been Assistant Sales Manager at the Company's Head Office in Toronto.

Born and educated in England, Mr. Eccles has had wide experience in Canadian sales and merchandising over the past six years.

THE ROYAL BANK OF CANADA

"Rights" Expire June 27

Holders of rights to subscribe for new shares of The Royal Bank of Canada at $41.50 per share are reminded of the approaching termination of the subscription period.

We strongly recommend that shareholders take full advantage of this opportunity to add to their holdings. We also recommend the shares to other investors. They may be purchased through us, either by acquiring rights and subscribing for the new stock or by purchase in the open market.

We offer facilities for transactions in the rights and shares, and will gladly supply information on request.

ROYAL SECURITIES CORPORATION LIMITED

244 ST. JAMES STREET WEST MONTREAL
360 BAY STREET TORONTO

Montreal Toronto Halifax Saint John Quebec Ottawa Hamilton Winnipeg Calgary Edmonton Vancouver Victoria Charlottetown St. John's, Nfld. New York

60-26

BOOKER BROTHERS, McCONNELL & CO., LIMITED, LONDON

Commonwealth Merchants and Traders, Sugar Producers in British Guiana, Shipowners, Engineers, Manufacturers, and Rum Distillers and Merchants.

Group net trading profit in 1959 reached a record figure of £1,248,751 ($3,496,503) compared with £972,683 ($2,723,512) in 1958. The total ordinary dividend of one shilling (14 cents) a share recommended for 1959 takes £477,009 ($1,335,625) compared with £381,608 ($1,068,502) in 1958. It is proposed to capitalise reserves on the basis of one new ordinary share for every ten held, and the directors hope to maintain the ordinary dividend in respect of 1960 at one shilling a share on the increased capital.

In his statement the Chairman, Sir Jock Campbell, refers particularly to the acquisition during 1959 of the common shares in Taylor, Pearson and Carson (Canada), who are wholesalers of motor car parts, domestic appliances and electronic supplies in Alberta and British Columbia. This was a natural extension for the Booker Group, which already included three other companies — Motor Car Supply Company of Canada, Bowman Brothers, and Gillis & Warren — having a broadly similar business to Taylor Pearson and operating in Alberta, Saskatchewan, Manitoba and Western Ontario. All these companies increased their sales in 1959 and produced, as a whole, highly acceptable profits. The acquisition of Taylor, Pearson and Carson effectively doubled Bookers' interest in Western Canada.

To meet the requirements of the Canadian and United Kingdom refiners for the delivery of raw sugar in bulk, Bookers are building a 40,000-ton bulk sugar storage and loading plant on the Demerara River in British Guiana and are equipping their factories to handle and transport sugar without bags. Bookers have also decided to build a 10,000-ton ship to carry raw sugar in bulk.

Through United Rum Merchants, Bookers have a close association in Canada with H. Corby Distillery. Sales in Canada of U.R.M.'s main brands of rum — Lemon Hart and Lamb's Navy — were higher than ever before. The coffee-flavoured liqueur Tia Maria, which is produced by a Booker subsidiary in Jamaica, has been successfully introduced throughout Canada.

Some 18% of the Booker Group's profits after tax came from Canada during 1959.

CONDENSED CONSOLIDATED BALANCE SHEET
(Converted at £1 = $2.80)

	1959 $	1958 $
As at December 31:		
Cash	1,042,913	1,130,298
Quoted investments*	24,931	76,224
Accounts receivable, prepayments, etc.	22,770,395	14,826,188
Sugar and other produce	2,774,766	3,200,943
Inventories	28,971,805	23,852,576
TOTAL CURRENT ASSETS	55,584,810	43,086,229
Fixed assets†	34,139,555	28,857,887
Trade investments‡	881,930	279,664
TOTAL ASSETS	90,606,295	72,223,780
Dividends payable	1,366,495	1,097,482
Accounts etc. payable	17,706,077	14,557,012
Loans from bankers —sterling area	4,429,149	990,867
—Canada	6,416,458	1,091,737
Current taxation	5,886,605	6,327,773
Provisions	2,047,716	1,932,818
TOTAL CURRENT LIABILITIES	37,852,500	25,997,689
5% debenture	2,187,500	437,500
Amounts set aside for future taxation	1,120,000	1,185,724
Interests of minorities in subsidiaries	8,883,336	7,892,774
Share capital	15,036,263	12,565,010
Capital reserves	6,370,375	6,818,874
Replacement reserves	3,422,286	3,966,388
Unappropriated profits retained in the business	15,734,035	13,559,821
	90,606,295	72,223,780
WORKING CAPITAL	17,732,310	17,088,540
*Market value	24,931	80,836
†After depreciation of	20,682,791	17,388,927
‡After amounts written off	$14,527	$26,306

CONDENSED CONSOLIDATED INCOME ACCOUNT
(Converted at £1 = $2.80)

	1959 $	1958 $
Years ended December 31:		
Surplus on trading	13,321,504	12,296,953
Add:		
Investment income	197,313	202,678
Net earnings	13,518,817	12,499,631
Less:		
Depreciation	2,930,763	2,698,772
Note interest	—	12,802
Provisions	659,921	849,274
Taxation*	5,193,751	5,025,860
Interests of minorities in subsidiaries	732,267	627,628
Replacement reserve	505,612	561,783
NET TRADING PROFIT	3,496,503	2,723,512
Add:		
Surplus on disposal of capital assets	448,627	670,771
TOTAL PROFIT	3,945,130	3,394,283
Less:		
Amounts written off	169,187	102,208
Preference dividends	61,740	57,960
Ordinary dividends	1,335,625	1,068,502
SURPLUS FOR YEAR	2,378,578	2,165,613
EARNINGS PER SHARE AND DIVIDEND RECORD:		
Preference shares	6.29	5.49
Paid 6% less tax	.10	.10
Ordinary shares	.39	.42
Paid and proposed free of income tax	.14	.14
SHARES O/S AS AT DECEMBER 31:		
6% Preference of £1 each	600,000	600,000
Ordinary of 10s. 0d. each	9,540,188	7,632,150
*After deducting prior year adjustments	$38,895	178,077

RHEINSTAHL HANOMAG builds modern Service and Parts Depot near Malton Airport

The first unit of Rheinstahl Hanomag's new Canadian headquarters has now been completed. It is located at the intersection of 401 Highway and the Malton Airport road (Dixon Sideroad). The new Head Office building contains showrooms, a large Spare Parts Depot, complete service facilities.

Rheinstahl Hanomag is organizing a nation-wide distributor-dealer sales organization. Applications for franchises are being received from many centres across Canada. The company is looking for the experienced, aggressive type dealer to share in the great expansion being planned.

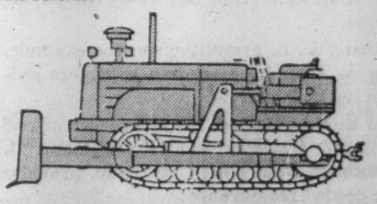
View of the new plant from Highway 401. It is strategically located 4½ miles from Malton Airport, 4 miles from Highway 400 and 6 miles from the Queen Elizabeth Highway. It is only 22 minutes to downtown Toronto.

125 YEARS OF MANUFACTURING EXPERIENCE IN EVERY RHEINSTAHL HANOMAG TRUCK AND TRACTOR

The Rheinstahl group is one af the world's really great industrial organizations. Finest engineering, highest quality workmanship are in evidence in every Rheinstahl Hanomag product. To this, in Canada, will be added fast, expert service —anytime, anywhere.

HANOMAG CRAWLER TRACTORS

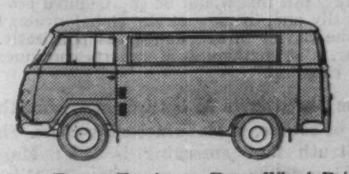
These are powerful brutes that are incredibly tough. The engine has only 8 moving parts. Extremely dependable, very economical to operate.



Hanomag K320 is revolutionary in design. The engine is a two-cylinder valveless diesel (only 8 moving parts including the powerful Dyno-charger).

HANOMAG TEMPO
Front Wheel Drive Trucks

The reliable POWER-PULL front wheel drive practically guarantees traction under all conditions. Many vans, pickups and bus models to choose from.



Hanomag-Tempo Trucks — Front Wheel Drive eliminates long, heavy driveshaft. Allows truck body to be as long or short as desired and as close to the ground as required.

HANOMAG DIESEL TRUCKS

One of Rheinstahl Hanomag's greatest achievements is in the Diesel field. Hanomag Diesel Trucks are extremely economical and are designed for rugged service.

HANOMAG FARM TRACTORS

The Hanomag Farm Tractor line is powered with the famous Hanomag Diesel — rugged, economical power. Proved on thousands of farms and hundreds of logging operations.

INTERESTED DEALERS ARE INVITED TO CONTACT THE HEAD OFFICE.

RHEINSTAHL HANOMAG OF CANADA LIMITED

889 Martin Grove Road, Rexdale, Toronto, Ontario

The Editorial Page

Why NES Needs an Overhaul

There is a paradox in the administration of this country's unemployment matters that cheats all Canadians.

Ottawa is quick to increase handouts to people without jobs. Our politicians have, in fact, managed to turn an actuarially based unemployment insurance fund into an excuse for a variety of welfare payments to just about every suitable category of voters.

But they are stingy, indeed, about producing money to help unemployed Canadians find new jobs. And it is here, surely, that money could be most gainfully used and here, certainly, that sensible and imaginative action is most needed.

As an article on page 36 shows, the greater part of the "administration" budget of the Unemployment Insurance Commission is spent in matching job hunters and employers—but that is precisely the part of total UIC spending which is growing most slowly.

UIC administration costs over the past decade have risen from about $24 million to over $36 million or by only 51%. Government contributions to the fund, meanwhile, have increased 74% over this period. Unemployment benefits paid by the fund—they came to more than $405 million last year—have just about quadrupled since the beginning of the 1950s.

The fund, in short, now provides handouts for thousands of seasonal workers who expect anyway to sit back for a good part of the year and whose contributions come nowhere near equaling the benefits received. It no longer is restricted to its original insurance purpose: To tide Canadians over when they go through periods of involuntary unemployment.

The clock obviously cannot be turned back. The slush fund, it seems, is here to stay.

But if Ottawa is seriously concerned about unemployment among the Canadian people, it is equally obvious that its employment service needs a complete overhaul and streamlining.

Our National Employment Service has fallen into disrepute among many employers. It has a reputation for having made, in frequent instances, only cursory attempts to match employers' requests and applicants needs.

Here is one indication of how little importance Ottawa attaches to its employment service: It has been paying the average placement officer less money than the average worker in manufacturing receives.

In other words, most jobs to which NES placement officers have been sending applicants paid better wages than the placement officer himself has. Some improvement in NES salaries is scheduled. But they still won't get as much as the average person who works in a private placement agency.

It is hard, indeed, to believe that this makes for the sort of organization that attracts and holds men of adequate training and ability and with a helpful point of view.

The prospects are that the 1960s will be tough years for Canadian manufacturing and for Canadian manufacturing employment.

Ottawa would be well advised to spend more on maintaining employment and less on maintaining the unemployed.

No Time to Sell Canada Short

Food for thought from Leo Dolan, founding director of the influential Canadian Government Travel Bureau:

"Not only government travel agencies must increase their promotional budgets, but there must also be a sudden awakening of private enterprise in this country to the ever-increasing competition which faces Canada's tourist trade."

His warning: Canadian tourist industries had better start advertising on their own hook if they expect to hold their present tourist income, let alone show any appreciable annual increase.

Tourist enterprises in this country are now getting unusually strong support from government. Few other industries get so much free advertising done for them as does the tourist industry.

Ottawa now lays out about $1.5 million a year to promote Canada in magazines and newspapers in the U. S.—where 85%-90% of our foreign tourist dollars come from.

The Ontario Government—which is one of the biggest provincial spenders on tourism—budgets almost $225,000 a year for advertisements aimed at drawing in the U. S. tourist.

Apart from a few larger Canadian resorts and from the Canadian transportation companies, non-government tourist promotion is barely big enough to be labeled a token.

The tourist, Dolan implies, helps those who help themselves.

His warning deserves the most careful consideration by the tourist associations and should be pondered thoughtfully by individual enterprises which make their living from the free-spending holidayer.

The Goose of the Golden Egg

Balance of payment difficulties are an old story in Canada. If, however, Canadian borrowing in the U. S. declines and Canada's exports rise, the story may eventually have a happy ending.

But in the U. S., balance of payment troubles are something disturbingly new—and the prospect of a big deficit is making some Americans ride off wildly in all directions.

Rising U. S. protectionism, for example, bodes no good for Canadian exporters selling in the U. S. market.

In this connection, the calm voice of one prominent business analyst, William H. Peterson of New York University, provides some needed reassurance:

> "The easiest answer to the payments deficit is protectionism, that is, no more Volkswagens, no more Scotch, no more Japanese cameras. But this would be shortsighted economically and, in view of our global strategy and the Soviet threat, dangerous politically. Rather, a strengthening of exports continues to be essential."

The big trouble in both Canada and the U. S., of course, is manufacturing costs. The hard truth now emerging is this: Many other countries can now undersell North America. This makes export sales more difficult. It makes domestic markets more vulnerable to foreign imports.

Peterson gets right to the root of the problem. What he says about U. S. trends applies closely, indeed, to the Canadian situation:

> "In the postwar era the average U. S. industrial wage rate, fringe included, has gone up about 8% per year. At the same time, industrial productivity has risen some 3½% per year and the cost of living index about 4.7% per year. These figures add up to a squeeze on industrial profits which have fallen from 5.7% of sales in 1947-50 to 3.5% of sales in the 1955-58 period. This squeeze means a sharp cutback in available funds for reinvested earnings and it's hurting our growth rate."

All of which reminds us of the story of the man who boasted loud and long about the high wages, liberal vacations and wide fringe benefits he got on his last job. When asked why he had left such a perfect place, he replied: "The company folded."

There's nothing like killing the goose that lays the golden eggs.

Suddenly It's Summer

Take an inner tube, strap on a new device of oars and oar locks and you're a summer yachtsman—of sorts.

So stated **FP** recently in its regular coverage of new products and new processes.

And in came a barrage of calls and letters. Two examples of what safety-conscious citizens have to say:

From Toronto: "Even a brand new inner tube is a very dangerous device when used as buoyancy equipment. It takes little to deflate them and if a child or a nonswimmer has been lured by the apparent safety of it beyond reach of shore or out of his depth, a drowning is almost sure to result."

From Port Arthur: "Are you aware that in the interest of water safety, the use of inner tubes is forbidden on many public beaches in Canada?"

In Ontario alone, the Red Cross tells us, 117 children drowned last summer and in eight cases, inner tubes floated the unwary child beyond his depth.

But the heart of the matter, surely, is this: If you can't swim, stay away from anything that floats, whether it is an inner tube, an inflated mattress or a small boat—and keep your children aware of all hazards associated with water.

June 19-26 is Red Cross Water Safety Week. Their message is simple and to the point: Learn to swim!

As Others See Us

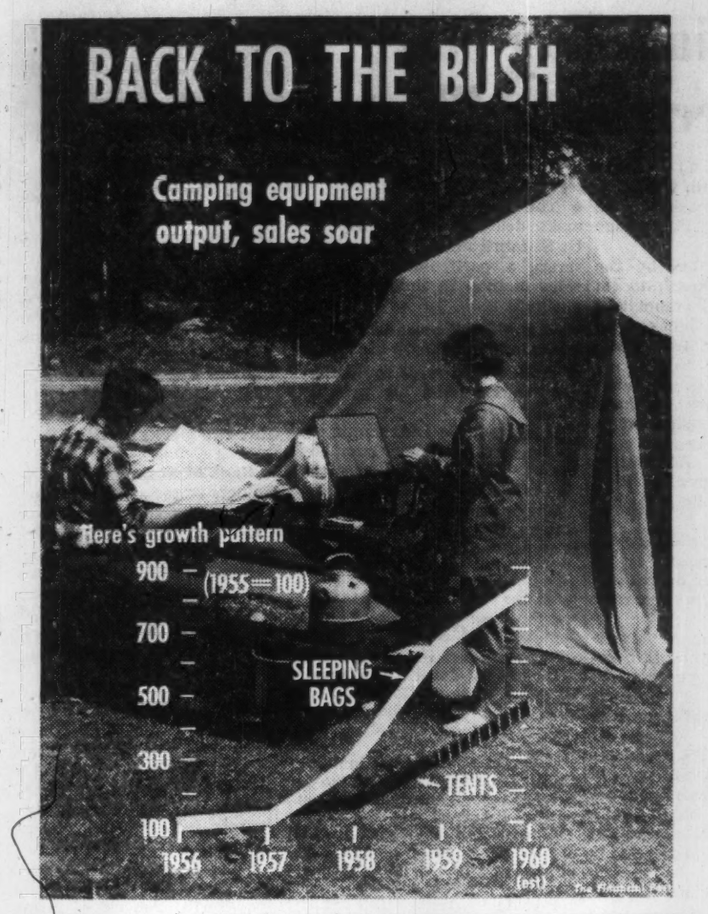
Here is a puzzling paragraph from one of a series of articles about Canada, by Carl T. Rowan, appearing in several U. S. newspapers:

"Canada's dilemma is that because of prosperity in Britain and continental Europe she can't get the people she wants (as immigrants); because fear of the 'yellow peril', a deep religious schism and some strong anti-Negro prejudices are all very real in Canada, she won't take the people she can get."

It's true that Canadian immigration policy admits only Caucasians in large numbers (the U. S. quota system, in theory unprejudiced, has precisely the same effect) but it's odd to find Canada described as a country with a "deep religious schism".

Three Roman Catholics, Thompson, Laurier and St. Laurent, have been Prime Minister of Canada; and the current debate about Sen. John F. Kennedy's church affiliation just wouldn't arise here.

This looks like evidence of religious harmony, not schism. In any case, so far as the public knows, religion is no barrier to admission of the immigrants we "can get". Canadians won't recognize their own country in this part of Mr. Rowan's account of it.



Post Scripts

"Man from Glengarry"

A man who might have been a school teacher, but turned to business instead, is the new president of Dominion Rubber Co. He is Merrill Frith Anderson, born in Maxville, in southeastern Ontario in 1903.

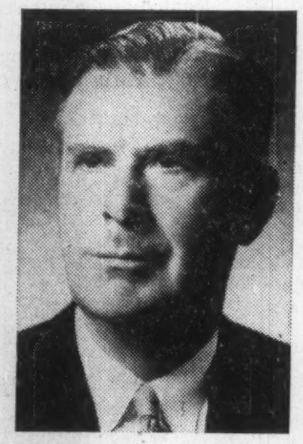
His father, a Glengarry county farmer, wanted Anderson to be a teacher but the parental persuasion wasn't strong enough. After attending public and continuation schools at Maxville, Merrill Anderson went to McMaster University, then located in Toronto. He specialized in physics.

Only 17 and a farm boy in a big city when he went to McMaster in 1920, Anderson feels he was too young and too inexperienced to derive full benefits from extracurricular activities which he limited to tennis and some intramural hockey.

Adept at mathematics, Anderson began his career as an accountant with the Canada Life Assurance Co. in Toronto, moved to the Bell Telephone Co. of Canada in Ottawa and later Montreal.

When his interest in accountancy waned, Anderson answered a help wanted advertisement and, as a result, joined Dominion Rubber's central planning department.

For six years in the 1930's he was Ontario Central Division manager at Toronto. In 1940 he returned to head office as director of development and new products, and climbed steadily up the ladder. In 1959 he was named executive vice-president and was elected a director.



MR. ANDERSON

A member of Kanawaki Golf Club, Anderson played only once last year. For recreation he prefers gardening at his home in the Town of Mount Royal and fishing or landscape painting at his summer residence on Lake Memphremagog in the Eastern Townships.

Anderson is a member of the Engineers' Club and the St. James's Club of Montreal. He is a director of the Rubber Association of Canada, an associate member of the Chemical Institute of Canada, past president of the Quebec Rubber and Plastics Group, now merged with the CIC.

He was married in 1933 to Agnes Cairnie of Montreal. They have one son, James, attending the University of New Brunswick.

* * *

Heads Ontario Chamber

"Our objective is to further the happy relationship between businessmen and local and provincial governments," says William Thompson Grant, the new president of the Ontario Chamber of Commerce. "It is our aim to ensure that any new legislation is to the benefit of both large and small businessmen."

Grant is well equipped to be spokesman for the 245-member Boards of Trade and Chambers of Commerce (which have a total membership of 45,000 businessmen) as he is past president of the Windsor Chamber of Commerce and has served on the provincial executive since 1957.

Born in Windsor in 1911, Grant was educated at Appleby College, Oakville, and at McGill University (Bachelor of Commerce, 1934).

MR. GRANT

He joined the Ford Motor Co. of Canada on graduation. Shortly after the start of World War II he joined the Essex Scottish Regiment. On return from overseas he founded an insurance agency, now Grant & Mingay Ltd., Windsor.

Grant has long been active in community affairs. He has served the Windsor Community Fund and Cancer Society. He is vice-chairman of Metropolitan General Hospital governors and vice-president of Assumption University of Windsor.

His hobbies are golf and curling. He was a founder of Windsor Curling Club and former director of Essex Golf & Country Club and Windsor Club.

He is married and has three children. Their eldest daughter, 21, recently graduated from the University of Toronto. The boy, 18, is just leaving his father's old school. The youngest, aged 7, "keeps me young," says Grant.

* * *

Chemical Spokesman

Wilfred Newman Hall — new president of the Chemical Institute of Canada — might well have been sailing the seven seas today without a thought of the chemical industry. When fresh out of Vancouver's technical high school in 1924 he couldn't get a job as an apprentice marine engineer he turned instead to chemical engineering.

The choice was a happy one for Hall and the Canadian chemical industry. His progress in the industry has been rapid. Today he is president of one of the largest chemical firms in the country — Dominion Tar & Chemical Co., Montreal.

But the quiet-spoken, enthusiastic Hall has never neglected his off-the-job responsibilities to the chemical industry. He has long been active in chemical association work and many young chemists and chemical engineers throughout the country speak highly of the kind guidance and advice they got at key times in their career from Hall.

Upon graduation in 1929 he came East and was with Canadian Industries Ltd. for 16 years. In this time his experience in the company was wide. He was in research and development; then control work; then back in straight production where he became manager of development of C.I.L.'s alkali division.

He joined Standard Chemical Co. in Montreal in 1945 as development engineer and rose in the company to position of vice-president in charge of operations.

In 1950 he was appointed vice-president of Dominion Tar & Chemical Co., Montreal, then an affiliate of Standard Chemical. In 1955 he became executive vice-president and in 1957 was appointed president.

Hall takes over the presidency of the C.I.C. at a time when activity is at a peak, and membership about 5,000, with 1,500 student members.

Cold War Targets

Whaley-Eaton Service of Washington in its "Foreign Letter", a weekly report on world affairs, sees these developments ahead in the continuing cold war:

Eight months of peace in Berlin, as promised by Khrushchov, do not mean that the free world can relax.

It is part of the communist strategy to keep the West off balance by putting the pressure on when least expected and in unexpected areas.

Western diplomats anticipate an early meeting between Khrushchov and Red China's Mao Tse-tung to determine the next cold war policy move.

Here are some of the more likely possibilities:

- **Berlin:** Despite his promise, Khrushchov may be forced into action in this communist-surrounded city. He can cut Berlin's line of communication with the West. Or he can manufacture new spy scares at will.
- **Greece:** Internally troubled Greece could be a prime target for Soviet pressure. Moscow has always wanted to get through to the Mediterranean.
- **Iran:** This is the softest spot in the West's northern defence line. At stake are access to the Persian Gulf and oil supplies for Europe.
- **Iraq:** The Communist Party there is strong and only awaits a signal from Moscow to make trouble. Nationalization of the Iraq Petroleum Co., one of the West's major suppliers, would be a prime target.
- **Pakistan:** Already entrenched in Afghanistan, the Russians have been conducting a radio propaganda campaign against Pakistan for months.
- **India:** This is within Mao's sphere of action. Pressure from Red China along India's borders will continue. Peiping lays serious claim to large areas of northwestern and northeastern India.
- **Laos:** Red activity has been stepped up noticeably in the past month or so. This even includes the murder of several pro-Western officials.
- **Formosa** (including Quemoy and Matsu): Communist Chinese troops mass in great strength opposite the off-shore islands, which can be used as stepping stones to Chiang Kai-shek's headquarters on Formosa.
- **Latin America:** Russia will eagerly take advantage of resentment toward the U. S. if markets fail to grow and development continues to lag. A step-up in Soviet economic penetration should now be logically expected.

"Quote-Unquote"

Prof. John C. Sawatsky, Institute of Business Administration, University of Toronto:

"The assumption has been made that man is by nature lazy, irresponsible and motivated primarily by creature comforts and material gain. The human being is assumed to be a machine, a logical self-regulating piece of equipment which seeks pleasure and avoids pain. The society generally and workers in particular are regarded as hordes of basically selfish and unorganized individuals.

"These assumptions seem to be those of industrial engineering as indicated by time-study, work-simplification and the kinds of incentive plans developed.

"Is it possible to develop work methods and incentive plans which better fit the nature of man? Is it possible to get effective productivity as well as job satisfaction and high morale?"

* * *

Donald Hillhouse, general manager, Canadian H. W. Gossard Co., on the teen-age market:

"They are serious, security minded and dependent. How can they be anything else with cold wars, summit talks, brinkmanship and atomic tests? They are probably less romantic, less realistic and less adventurous than their parents were 20 years ago. Today 30% of the marriages occur with couples under 20 opposed to 24% in 1952. They want conventional, well-managed secure lives, a job in a big company, a house in the suburbs close to the school and supermarket, with a Chevrolet in the driveway."

* * *

Magistrate L. A. Surtees, Saskatoon, on bureaucracy in the courts:

"The glorious Mounties who used to ride magnificently into the setting sun are becoming nothing but desk jockeys. We want to avoid riding double with them."

* * *

Louis A. Chesler, executive director, General Development Corp. housing authority, on a new Florida housing development:

"The new program, when all details have been completed, will introduce and provide a new American way of life."

* * *

Dr. J. E. Gimby, in Canadian Medical Association Journal:

"When we shed this garment we call life, we are entitled to do so with dignity. Not, as so many patients in extremis do, in a tangle of glass jars, pipettes, tubes and needles in veins, mouth, nostrils, and bladder, or strung up on a cot with ropes, bars, pulleys and weights like some sort of fowl. This business of delaying the final unconscious gasp is ridiculous, cruel and disrespectful, both to life and to death."

What Others Are Saying

Value of Profits

Vancouver Province

Maybe it is time we took another look at the dictionary about the word "profit". It is not, after all, a nasty word.

M. J. Foley, president of MacMillan Bloedel and Powell River Company, reminded businessmen of this recently. Mr. Foley was disturbed about the "misunderstanding" between big corporations and the growing section of the public which regards profits as something not quite nice. He felt it is "dangerous folklore" to distrust big corporations just because they are big.

Where would our standard of living be if it were not for profits in our industry? Where would the money come from for industrial expansion to meet the needs of an increasing labor force?

How many jobs do unprofitable businesses offer? How much in the way of investment possibilities? How much in the way of purchasing power?

Even the biggest corporation in the world, the state-operated monolith of Russian trade and industry, must exact its profit in the form of taxes. Only in that case, the rewards to those who produce the profit are considerably less than those enjoyed by our people.

It seems to us that critics of "profit" would benefit from a clearer understanding of our dependence on it, and of how business operations must produce it to sustain us.

COMMENTING on the compulsory military service resolution passed by the Canadian Legion, the **Peterborough Examiner** tartly says: "If the Legion simply wants it as a help to the youth of the country, it had better bring its ideas a little more up-to-date than this. The country needs manpower and work for peaceful and productive pursuits, not for future warfare."

WE ARE CONVINCED that competition is necessary in aviation, says the **Winnipeg Tribune.** But it should be possible to encourage competition while ensuring that efficient operators are able to finance maintenance and expansion of the country's aviation services, particularly to Northern areas.

IF THE DAIRY INDUSTRY really wants Canadians to drink more milk which is in over-supply, it might try reducing the price, suggests the **Ottawa Journal.** It's an old-fashioned idea, but it might work.

CANADIAN TELEVISION needs new talent, new faces, says the **Calgary Albertan.** The CBC has failed to get out of second-gear and produce at an imaginative level. Perhaps private commercial production will achieve better results.

Stop Me If . . .

His daughter had just arrived home from finishing school and the brand new millionaire was showing her about the mansion he had built in her absence. At the swimming pool they stopped to watch several athletic young men diving and stunting.

"Oh, Daddy," exclaimed the girl, "and you've stocked it just for me."

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June 18, 1960

Eyes, Bones, Arteries All 'Banked'

How to make more "spare parts" usable is difficult medical problem . . .

By J. B. McGEACHY

LAST WEEK I reported here that the supply of cadavers at medical schools is sometimes precarious. The anatomists rely mainly on "coroners' cases", meaning bodies unclaimed by any relative. Those who do leave their bodies to science save their heirs funeral costs; for decent burial is always given to cadavers, once dissected, at the school's expense.

Here I report on the "eye-banks" and on some of the scientific and legal questions involved in using human "spare parts" after death.

Many more people are willing to give their eyes than to give their bodies. "Eye-banks", of which there are five in Canada (at Vancouver, Edmonton, Winnipeg, Toronto, Montreal), are a familiar contemporary marvel. Eye transplants, though the operation is only about six years old in Canada, now happen daily in all parts of the country.

The common law, as expounded earlier, applies in the same way to eyes as to bodies. That is to say, the testator has no property right; the next-of-kin is the legal custodian and has the authority to countermand wishes expressed before death.

This common law doctrine was varied somewhat, with respect to eyes, in a statute passed in Ontario in March of this year. It's called the Cornea Transplant Act and contains, as I read it, two new points.

Next-of-kin may now give eyes from a dead person even though that person expressed no such wish. And if a man dies in hospital, having indicated a wish to give his eyes, the hospital superintendent may have the operation performed on his own responsibility — without consulting relatives who would normally have the say.

A point to be noted in explanation of this second provision, is that speed is essential. Eyes must be removed from a cadaver within eight hours at the most.

It's hoped that the new Ontario law will increase the flow of eyes to the eye banks. Meanwhile, they have a fairly regular and plentiful supply — though it's never adequate to meet the needs of the blind people on their list.

The right procedure, in "willing" one's eyes, is to sign a donor card supplied by the Canadian National Institute for the Blind, and to let the CNIB as well as nearest relative, doctor and lawyer know that one has done so. From Mrs. Anne Wolf, an energetic woman who works for the ophthalmology department of the university in collaboration with the CNIB, I learned that there are 23,000 blind in Canada; but only 1,500 of them, alas, can be helped by surgical transplant in the present state of science.

This brings me to the scientific part of this discourse, for which I'm mainly indebted to Dr. P. K. Basu. He is Indian, a graduate of Calcutta. In Toronto, where he has lived for four years, he's director of eye research in the ophthalmology department.

J. B. McGEACHY

"In Canada 1,500 blind persons could be given sight by 'corneal transplant'. The supply of eyes in the eye-banks is never adequate. To give your eyes, after death, sign a CNIB donor form and make sure to notify next-of-kin, executor, doctor and lawyer."

Only three parts of a dead body may be successfully used for transplant to living persons — the eyes, arteries and bones. An artery bank exists at the Banting Institute in Toronto, a bone bank at the orthopaedic department of the Toronto General Hospital. They are supplied from cadavers.

Mysteriously, to a layman, the usable eye parts are transferred in a living state (hence the need for speed in the operation) while bones and arteries are inert when transplanted. A bone transplant is easy to imagine. A dead man's artery may be used to replace a section of blood vessel, containing a clot, excised from the living patient; so this can be a life-saving operation.

But how can dead bone or artery tissue fit into a living organism? The medical answer is that, in some not explicable way, they promote the growth of live tissue. Artificial plastic artery sections have been used for the same purpose; but they're less effective.

The next question any layman is bound to ask must be this: Why cannot "spare parts" of all sorts, including large organs like kidney, liver, stomach and so on, be removed from a dead to a living person?

In answer the doctors use the expression "immunological reactions". **It means that your body or mine, when "foreign" live tissue is grafted on, grows "anti-bodies" that will attack and destroy the graft. Transplanted bone and artery, being dead, don't arouse this response; but a live kidney would do so (a dead one would be of no value.)**

To return to the matter of eyes. The cornea, which is the hard central core in the front of the eyeball, can be grafted safely even though alive; it doesn't provoke anti-bodies because, as a horny substance, it has almost no blood vessels and lives a peculiar bloodless life of its own.

Similarly the interior vitreous fluid can be transplanted from a dead eye into a living one, the reason being that this fluid isn't cellular or protoplasmic but rather crystalline; indeed not alive at all. Apart from the cornea and the fluid, other eye parts are (at present) useless for transplanting though valuable for research.

This basic lesson in medical science, acquired by painful inquiry in the last day or two, explains many things. It explains why only a minority of blind persons, those with corneal injury or vitreous disorder, can be cured by transplant surgery (but the cures, when all conditions are right, may run as high as 96%).

The scientific data here assembled also explain why the age of a donor's eyes doesn't matter; those of a 96-year-old man, recently received in Toronto, were as useful as the eyes of a young person. Age does not affect the cornea.

It is of no importance if the donor has suffered from myopia, presbyopia, detached retina, cataract, or even glaucoma. Provided the cornea is undamaged, the eyes can be used; and one pair of eyes may relieve four people, two by corneal transplant, two by the use of vitreous fluid.

Doctors are working on the problem of "immunological reaction". It's the surgeon's dream that, at some unforeseeable date, all sorts of organs — livers, lungs, even hearts—will be freely transplantable; but this depends on the discovery of a way to prevent or control production of those "anti-bodies" that the human body, often usefully, but sometimes perversely, manufactures.

The first of these pieces began by saying that the high cost of dying can be avoided entirely by a gift of the body to a medical school; but there is no reason, except social pressure and convention, why a normal burial should be a family extravaganza. The Toronto Memorial Society, a voluntary, private group of about 400 people, is striving to create a public opinion that will accept simple, inexpensive funerals as "respectable".

I don't intend here to get into the argument about alleged high pressure by undertakers; but I would like to pass on a few facts gleaned in my recent inquiries about the disposal of the dead.

There is no law requiring that a corpse be embalmed or, for display in an open coffin, treated with cosmetics; these practices are almost unknown in Britain and Europe, totally unnecessary for public health.

There is no law either compelling anyone to buy a regulation coffin as sold by the undertaking trade. A simple box made by a carpenter fully meets the requirements.

Cremation is not markedly less expensive than earth burial if an expensive coffin is bought (and this is often done) merely for consumption in the flames. The usual cost for the cremation service itself is only $60.

The number of cremations in Canada is increasing rapidly; but I cannot discover what percentage of Canadians are cremated at death. (No statistics are kept.) In Britain the figure was 32% last year; it is as high in Sweden, and 71% in the city of Stockholm. Cremation has the advantage of not using valuable land for cemeteries and to many individuals it seems somehow preferable to earthly interment.

As Sir Thomas Browne wrote in "Urn Burial", to wind up with a recondite classical quotation, "To be knav'd out of our graves, to have our sculs made drinking-bowls, and our bones turned into Pipes, to delight and sport our Enemies, are Tragicall abominations escaped in burning Burials."

But I would not wish these thoughts to discourage anyone from becoming a benefactor of the medical school or the eye-banks.

Second of two articles.

The Royal Bank of Canada

Rights expire June 27, 1960

Royal Bank of Canada shareholders and all other holders of the Bank's rights are reminded that these rights expire Monday, June 27, 1960.

We recommend Royal Bank of Canada shares for investment and believe this is an opportune time to purchase shares of the Bank and for present shareholders to add to their holdings by the exercise of their rights.

A. E. Ames & Co.
Limited
Business Established 1889

Offices in Principal Canadian Cities

Seat Width, Not Costs, Sets Taxi Size

Winnipeg has opened the door to use of smaller foreign cars as taxicabs — but on a trial basis only.

Veterans-Nash Taxicab Association has been given a 6-month license to operate a Zodiac, made by **Ford Motor Co.** of Dagenham, England. It is the only foreign car licensed among 400 taxis in the city.

If no complaints are received by the Taxicab Board, other operators may be permitted to use similar cars.

Although a few small cars are reported in use as taxis in Montreal and Vancouver, Toronto has set a definite limit on the size of taxicabs.

Rear seats must be at least 56.5 in. wide and there must be at least 10 in. clearance between the leading edge of the rear seat, and the back of the front seat when it is adjusted as far to the rear as it will go.

This ruling was adopted by the Metropolitan Toronto Licensing Commission last December.

And the commission emphasizes that it means what it says — seat width, not width between the side walls of the car. That lets in cars like Mercedes-Benz (if the front seat is bolted far enough to the front), Rambler and Lark.

But it excludes all the new compacts made by the Big Three.

Metro Taxicabs in Toronto operate two Mercedes-Benz diesel-powered cars. They like them for fuel economy and low maintenance costs.

"But it's surprising how soon our patrons get to know that we have them. Many of the calls that come in specify — Don't send a small car," said a company representative.

Drivers employed by large companies find they can make perhaps twice as much income with a standard-sized car.

But the independents, who own the taxi they drive, would like smaller cars.

They may use 400 to 500 gal. of gasoline a month, and the saving could be considerable.

Transport Lists Latest Projects

Studies new cable-laying ship, re-equips docks, wharves, installs radio transmitters, sets up airway for jets . . .

OTTAWA (Staff) — A number of announcements and complaints of business significance were heard during the House of Commons' opening discussion of the Department of Transport estimates.

Here is a quick check-list:

● **DOT Ships:**

A cable-laying ship, strengthened for work in ice, is among the projects now under study as part of the Department of Transport shipbuilding program.

The feasibility of building an atomic-powered ice-breaker is also "under intensive study in a British shipyard where such matters are being studied very thoroughly".

An atomic-powered vessel of equal size and power to our largest conventional icebreaker would cost twice as much. Its operation might cost three times as much.

DOT has this year passed the peak of its program for building conventional ships.

● **Ice-clearing.**

The "bubbler process" for keeping navigable waters free of ice has been studied by the National Research Council.

Its finding:

Satisfactory for use in harbors and around wharves; impractical for use in shipping channels.

● **Winter navigation.**

The government draws a clear distinction between the north and south shores of the St. Lawrence estuary.

The north shore "requires winter navigation", said Hees.

There are no railways to supply ports like Baie Comeau, Seven Islands and others on the north shore.

The main traffic from the north shore is in products of the hinterland which move directly to overseas points. Some of them also move into the Maritime Provinces.

These Maritime Provinces also benefit by supplying many of the needs of the north shore communities during the period of winter navigation.

The government supports, for the same reason, winter traffic between Quebec City and these north shore ports.

● **DOT wharves and buildings:**

A 10-year program is being pursued to re-equip wharves and buildings at DOT marine agency depots.

● **Radio.**

New radio transmitters are being installed at many marine stations where existing equipment is as much as 40 years old. Aeradio stations in northern Canada are being equipped with low frequency equipment in addition to the high frequency equipment which is liable to black-outs.

● **Air traffic control:**

A new high altitude airway, above 24,000 ft., is being established for jet aircraft only. Controlled landings and take-offs in Canada are expected to reach three and a half million a year.

● **Airlines policy:**

The government's policy on air carriers was vigorously attacked by former Transport Minister Chevrier. His principal criticisms were:

Both TCA and the smaller airlines are worried about the international arrangements made by the government.

In particular Chevrier cited **BOAC's** landing rights at Toronto and the Montreal-Chicago route granted to **Lufthansa** and **Air France.**

Decontrol of Canadian carriers in groups C and B had led to many bankruptcies: 38 companies had applied for suspension of services, and 15 for cancelation of their permits.

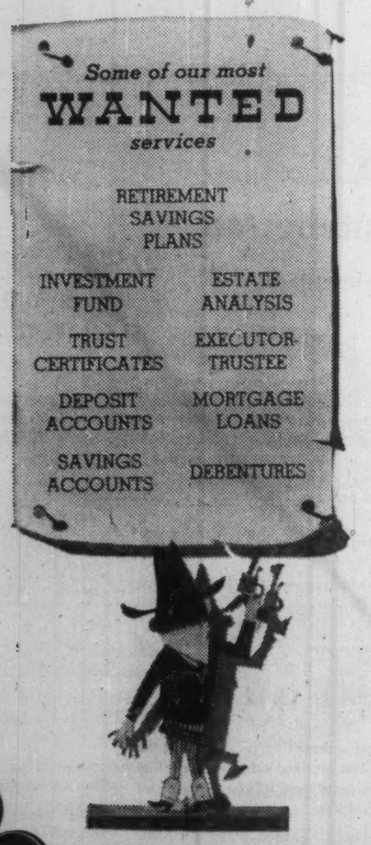
Autair Helicopter Services should be investigated, said Chevrier, in order to ensure the safety of passengers carried during its present contract on the polar continental shelf. For the sake of this company, he said, Hees had overruled the decisions of the Air Transport Board, and Autair had been allowed to disregard the board entirely.

In the case of **Georgian Bay Airways Ltd.**, the Transport Minister had not only overruled the board: he had passed an order-in-council which actually changed the law, said Chevrier.

INVEST IN SCOTCH WHISKY FILLINGS

Scotch Whisky Fillings over the past few years show an appreciation of 25%. For full particulars write:

ALEXANDER DAVEY (HOLDINGS) LTD., Ball House, 175 Regent Street, London W.1, England. Cables: Davey, London.

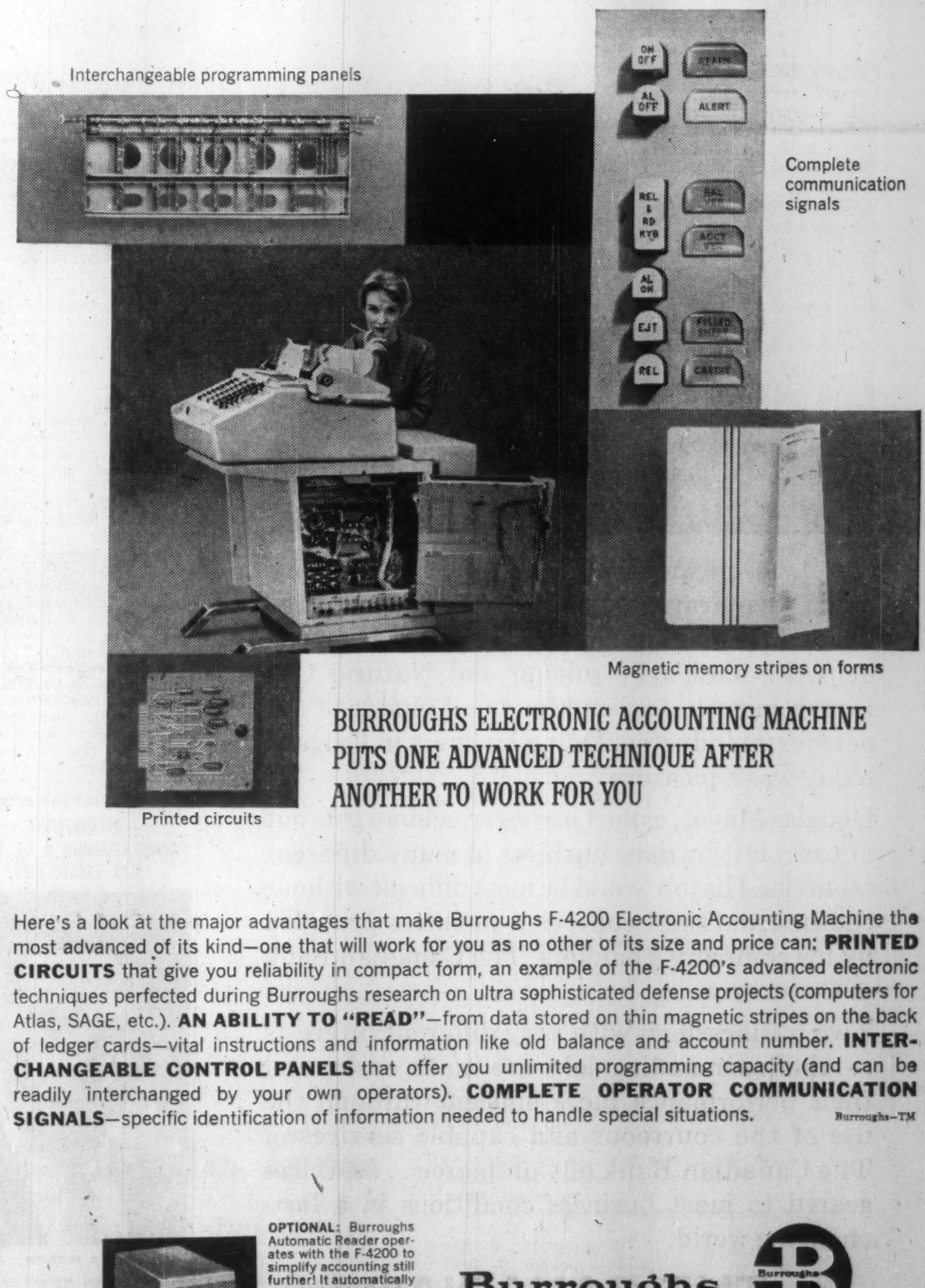


Huron & Erie - Canada Trust

21 OFFICES AT YOUR SERVICE

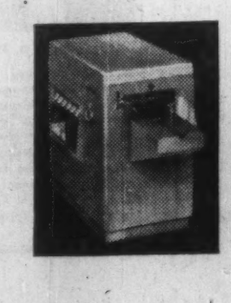
Calgary, Chatham, Edmonton, Guelph, Hamilton, London (5), Montreal, New Westminster, Regina, St. Catharines, St. Thomas, Sarnia, Toronto, Vancouver, Victoria, Windsor, Winnipeg

RC 126



BURROUGHS ELECTRONIC ACCOUNTING MACHINE PUTS ONE ADVANCED TECHNIQUE AFTER ANOTHER TO WORK FOR YOU

Here's a look at the major advantages that make Burroughs F-4200 Electronic Accounting Machine the most advanced of its kind—one that will work for you as no other of its size and price can: **PRINTED CIRCUITS** that give you reliability in compact form, an example of the F-4200's advanced electronic techniques perfected during Burroughs research on ultra sophisticated defense projects (computers for Atlas, SAGE, etc.). **AN ABILITY TO "READ"**—from data stored on thin magnetic stripes on the back of ledger cards—vital instructions and information like old balance and account number. **INTERCHANGEABLE CONTROL PANELS** that offer you unlimited programming capacity (and can be readily interchanged by your own operators). **COMPLETE OPERATOR COMMUNICATION SIGNALS**—specific identification of information needed to handle special situations. Burroughs-TM



OPTIONAL: Burroughs Automatic Reader operates with the F-4200 to simplify accounting still further! It automatically runs trial balances, transfers balances to new forms, posts fixed items. For a look at the F-4200 and Automatic Reader in action, call our branch. Or write Burroughs Adding Machine of Canada, Limited. Factory at Windsor, Ontario.

Burroughs

"NEW DIMENSIONS / in electronics and data processing systems"

(If you are interested in discussing a professional sales career representing the most complete line of data processing equipment available in Canada, you should address inquiries to Mr. J. L. Rapmund, General Manager, Toronto.)

SYKES TOOL CORPORATION LTD.

The Corporation regrets to announce that pending the consideration of future plans and policy it is obliged to curtail its manufacturing activities at Georgetown for the present. A further statement will be made in due course. The other trading activities of the Corporation will be unaffected by this action and will continue as at present.

ANNOUNCEMENT

ALLAN R. FLEMING

Cooper & Beatty, Limited, type craftsmen, announce the appointment of Mr. Allan R. Fleming to the position of Vice-President in charge of Creative Typographic Services.

Educated in Toronto, Mr. Fleming spent some years in the advertising agency and art-studio field. After two years in Europe he joined Cooper & Beatty, Limited in 1957.

His work has gained international recognition, most recently for the C.N.R. graphics re-design program and he has received numerous awards from New York, Montreal and Toronto advertising art and typographic societies.

JOINS CCA STAFF

Ernest L. Mahoney of Ottawa has been appointed to the staff of the Canadian Construction Association as assistant to the general manager in charge of apprenticeship and the CCA tender reporting service. He has experience in administration in the oil industry and in sales and merchandising in the pharmaceutical field, latterly with the sales division of **Julius Schmid (Canada) Ltd.** Prior to that he was with **McColl-Frontenac Oil Co.**

The Outlook

(CONTINUED FROM P. 1)

gain but hardly an indication of a spurt in the economy.

And there are indications in the U. S. that business spending on new plant and equipment—while up substantially from last year—may no longer be on a rising trend, but may be flattening out. The signpost: New orders for durable goods have been on a persistent downtrend in recent months. It makes sense; with overcapacity visible in many plants, including steel plants, there is little reason for business to push its capital spending projects with much vigor.

It appears that U. S. monetary authorities are noting the indecisive nature of current U. S. business activity. The Federal Reserve Board, the U. S. equivalent of the Bank of Canada, shifted from an active "tight money" policy to a neutral position a few months ago. And most of its member banks recently dropped the rate at which they will lend to commercial banks from 4% to 3½%. **Speculation is that money may become appreciably easier in the U. S. before the year is out.**

But with U. S. exports up 22% in the first four months over year-earlier totals, with U. S. retailers chalking up a 3% monthly advance (seasonally adjusted) in April, and with consumer incomes likely to remain at or near record levels, it's likely that no sag will develop this year.

The First National Bank of Chicago sums up prospects this way: "Business has been remarkably stable in recent weeks as downward pressures on some sectors of the economy have been offset by rises in others. The total effect of these shifts is that business remains at very high levels with moderate improvement expected in the months immediately ahead."

* * *

Whatever the portents from the U. S. imply for Canadian business, **few observers of the Canadian scene itself will find comfort in the 1960 trend in bank loans to industry and to individuals.** This is generally adjudged to be one of the most current statistical indicators of Canadian prospects.

In total, **these loans outstanding on the books of the banks have moved up and down indecisively since the beginning of the year**—and now register about 2.8% higher than they did in early January.

By contrast: When business was pushing ahead more rapidly last year, general loans rose by some 13%-14% during this period.

But the Canadian Bank of Commerce in its latest commercial letter shows that the loan trend is really much worse than the actual dollar figures indicate.

The bank has had general loan statistics adjusted to discount purely seasonal influences. This shows that, seasonal factors considered, loans are lower now than they were early in January.

In the broad outline, the seasonally adjusted trend in loans reveals that there was an abrupt rise from about $4.6 billion to over $5.3 billion between January and August last year, then a general leveling off over the fall and a fairly persistent downtrend ever since.

The implication: Lighter demand for funds than is normally expected at this time of year which, in turn, shows how little new steam appears to be left in the current business expansion.

See More Canadian Sales In U.K. Clothing Market

By MAURICE LUCOW

LONDON, Eng. — A dozen Montreal dress and sportswear manufacturers showed their fall lines to British retailers last week and came away with enough business to encourage them to come back in October with spring merchandise.

They'll likely convince another dozen manufacturers to come along in the fall.

Organizer of the current selling mission, H. H. Stein, executive director of the Montreal Dress & Sportswear Manufacturers Guild, said he has booked 30 rooms in London hotel for October.

Toronto manufacturers are also planning an assault on the U. K.

Ike Fram, executive director of the Toronto Dress Manufacturers Guild, has been here for the past two months researching the market.

He says he's convinced there is great potential here for Canadians and he hopes to interest a number of his members to come over in the fall or, at the latest, by next spring.

Montreal manufacturers sold $300,000 worth of spring-summer merchandise here last December and secured about $100,000 more in repeat business.

Total business written this trip was not available at press time, but Stein indicated it would equal last season's total.

The manufacturers are pleasantly amazed at the size of the orders they get.

One blouse manufacturer got a "token order" for over $1,000. In Canada, a $1,000 order is big business.

One chain ordered for its stores in West Africa—so Canadian merchandise will be sold soon in such places as Ghana and Nigeria.

The spring-summer merchandise is now in London stores and, according to retailers, is selling well.

A number of the stores are promoting it as Canadian-made. Others include it in regular stock.

There's nothing sentimental about British dealings with Canadian manufacturers.

Fashion retailers here — as everywhere — are always on the lookout for "something different" and are finding it in Canadian merchandise.

They're also getting prompt delivery by air, although in some cases U. K. customs has held up shipments.

Some of the manufacturers who showed here had appointments for later in the week with retailers in Brussels and Paris, and planned to show in those cities before heading back for home.

Most of the dozen manufacturers who showed have appointed agents here.

'Don't Rush Expansion' In Maritimes

From Our Own Correspondent

HALIFAX — Maritime businessmen were urged at midweek to pay more attention to long-range marketing and capital planning and to keep a sharp eye on their competitors.

Eighty manufacturers and processors gathered for a one-day conference at Dalhousie University.

It was the seventh in a series offered by the Institute of Public Affairs, Dalhousie University, under auspices of the Dalhousie Bureau of Industrial Relations, a senior management advisory group.

K. G. Belbeck, management consultant for **Stevenson & Kellogg Ltd.,** said businessmen must rely on general economic indicators to assess market potential.

"But don't rush expansion of plant facilities," he cautioned, "unless research dictates emergency action."

On the subject of sales, he said, "If your system, or lack of system, enables you to predict sales within a 10% margin or error, it is questionable whether you should spend more money on forecasting."

Biggest problem: Predicting turning points in business.

But, said Belbeck, the more comprehensive your research, the more likely you are to discover more than one possible course of action.

Car Imports Could Pay Higher Tax

(CONTINUED FROM P. 1)

tives in London and Europe asking for up-to-date information about the actual prices being paid by auto dealers in exporting countries.

More recently, a brief from the auto-manufacturing communities of Windsor, Oshawa, St. Catharines and Oakville asked the government to raise the valuations.

The delegation from these communities was told that the matter would be considered as soon as up-to-date reports arrived from overseas.

These reports, it is believed, are likely to show that U. K. manufacturers sell in larger quantities, and give larger discounts, to their Canadian distributors (usually related companies) than to any dealers in the U. K.

The U. K. price lists may cover such discounts.

But if it is found that no sales are in fact being made in such quantities, it is considered likely that the government will change its valuations.

Cars imported from the U. K. will probably be valued at the price charged to the largest U. K. dealers, instead of the theoretical price that might be charged for larger quantities.

New Firm Offers Aerial Surveys

Survair Ltd., a new commercial air service company, has been formed in Ottawa to perform exploration and survey flying.

Survair will operate helicopter and fixed-wing aircraft across Canada and in the foreign operations of **Canadian Aero Service Ltd.,** Ottawa.

Officials of Survair: Thomas E. Rowlands, president; J. W. Strath, vice-president; and Grant F. Ray, secretary-treasurer. Its directors include these officers and James E. Wells and Robert M. Reckeweg.

Winnett Boyd Heads Little's Canadian Firm

Arthur D. Little Inc., international consulting research company, has established a Canadian subsidiary to facilitate work for Canadian clients.

President of **Arthur D. Little of Canada Ltd.,** Toronto, is Winnett Boyd, formerly in charge of the design of Canada's NRU atomic reactor at Chalk River, Ont.

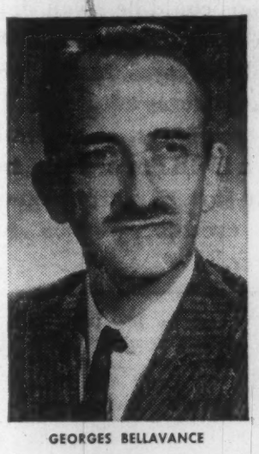
The new firm will at first be a sales and service organization, Boyd says.

"Eventually we hope to develop into an operating effort."

The Cambridge, Mass., parent company has done research work for the provinces of Newfoundland, Manitoba and Nova Scotia and many private firms in Canada.

Boyd was also in charge of team of engineers that designed the Chinook and Orenda engines, and later a gas-cooled nuclear reactor for **A. V. Roe.**

ANNOUNCEMENT

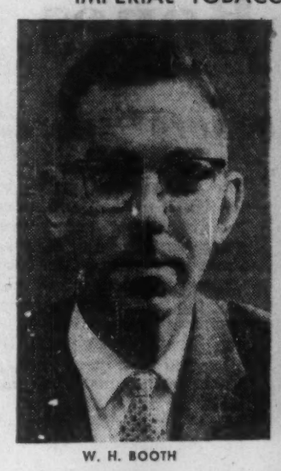


GEORGES BELLAVANCE

Georges Bellavance has joined the Industrial Development department of The Shawinigan Water and Power Company, it is announced by W. J. Lavigne, department manager. Mr. Bellavance was previously staff assistant with the Company's Commercial and Distribution department at Joliette.

ANNOUNCEMENT

IMPERIAL TOBACCO APPOINTMENTS



W. H. BOOTH

G. G. ROSS, C.A. (Scot.)

Appointment of W. H. Booth as Assistant Comptroller, sales and advertising; and G. G. Ross as Assistant Comptroller, leaf and manufacturing costs and accounting has been announced by J. A. Calder, Vice President and Treasurer of Imperial Tobacco Company. Mr. Booth joined Imperial in 1935 and previously held the position of Assistant Comptroller of leaf and manufacturing costs and accounting. Mr. Ross joined the Company in 1958 and previously served as Manager of the Office Methods and Equipment Department. Both appointees served in World War II, Mr. Booth with the RCAF in the United Kingdom and Mr. Ross with the RNVR in the Far East.

For Information of Shareholders

UNITED COBALT MINE LIMITED

Head Office
145 Yonge Street, Toronto, Ont.
EMpire 4-7576

Authorized Capital—4,000,000 shares of $1.00 Par Value

Issued — 2,682,873 shares

Renewed activity on the Company's properties in the COBALT Silver area makes it imperative that Shareholders have their stock registered in their own name to receive reports.

Registrar and Transfer Agent.

CROWN TRUST COMPANY

302 Bay Street Toronto, Ontario

New Issue

$2,000,000

Nottingham Gas Limited

(Incorporated under the laws of the Province of Saskatchewan)

6⅜% First Mortgage Sinking Fund Bonds, Series A

Dated June 1, 1960 To mature June 1, 1980

Trustee: The Royal Trust Company

Counsel: Borden, Elliot, Kelley & Palmer
J. F. Barrett, Esq., Q.C.
Thom, Bastedo, McDougall, Ready & Hodges

The placement of this issue was arranged privately by the undersigned.

McLeod, Young, Weir & Company Limited

Wood, Gundy & Company Limited

James Richardson & Sons

Petroleum engineer Ben Moss arrived in Calgary only this morning but already he feels right at home. Much of his confidence springs from the help the bank's Petroleum and Natural Gas Department has given him on all phases of the petroleum industry. Doing business in Calgary today was a pleasure.

Douglas Mavor, export manager, seldom gets out of town but he does business in many different countries. His job would be most difficult without the international collection facilities provided by his company's bankers, The Canadian Bank of Commerce.

Two businessmen with very different interests . . . their demanding jobs are made easier and their performance more efficient through the use of the courteous and capable services of The Canadian Bank of Commerce . . . services geared to meet business conditions in a fast-changing world.

THE CANADIAN BANK OF COMMERCE

Call us your bankers

ANNOUNCEMENT

APPOINTMENT
WOOD, FLEMING & CO. LTD.
REAL ESTATE DEPT.

W. D. PETERSON

W. E. Patterson, President of Wood, Fleming & Company Limited, is pleased to announce the appointment of W. Duncan Peterson as Manager of the company's newly formed Industrial Projects Division. Mr. Peterson has had extensive experience in the Industrial Development field having been associated with the Toronto Industrial Commission and, more recently, with Toronto Industrial Leaseholds.

New Issue

$7,500,000

Province of Saskatchewan

5½% Sinking Fund Debentures

To be dated July 15, 1960 To mature July 15, 1980

Principal and half-yearly interest (January 15, and July 15) payable in lawful money of Canada in the Cities of Toronto, Montreal, Saint John, Winnipeg, Regina, Edmonton or Vancouver at the option of the holder. These Debentures may be redeemed as a whole but not in part at par on July 15, 1978, or any interest payment date thereafter. Coupon Debentures will be issued in the denominations of $100,000, $25,000, $1,000 and $500 and will carry provision for registration as to principal only.

Legal Opinion: Messrs. Daly, Harvey & Cooper

The Province will provide for an annual sinking fund of a sum equal to three per cent of the principal amount of these Debentures.

Descriptive circular available on request

Price: 98.00 and accrued interest to yield 5.67%

We offer these Debentures if, as and when issued and accepted by us subject to the favourable legal opinion of Counsel. Subscriptions will be received subject to rejection or allotment. It is expected that these Debentures in interim form will be available for delivery on or about July 15, 1960.

Harris & Partners Limited
Dawson, Hannaford Limited
Osler, Hammond & Nanton Limited

Burns Bros. & Denton Limited
Midland Securities Corpn. Limited
Anderson & Co. Limited

ANNOUNCEMENT

CROWN TRUST APPOINTMENTS

EDWIN S. HIGGIN

ROBERT J. HILLIARD

Crown Trust Company announces the appointment of Mr. Edwin S. Higgin as Estates Manager and Mr. Robert J. Hilliard as Assistant Estates Manager at its Head Office in Toronto.

Mr. Higgin and Mr. Hilliard have been Trust Officers at Head Office for a considerable number of years and bring to their new duties long experience in estate and trust work as well as in other departments of a Trust Company.

Meisterschaft COLLEGE
LIMITED
"Shortest and Surest Method"
MATRICULATION
Complete matriculation in one year – No extracurricular activities – Individual instruction – Small study groups – Applicants now being considered for Autumn Term
84 WOODLAWN AVE WEST TEL. WALNUT 3-1189 TORONTO 7, CAN.

A Reminder

The Royal Bank of Canada

warrants to subscribe for new shares expire

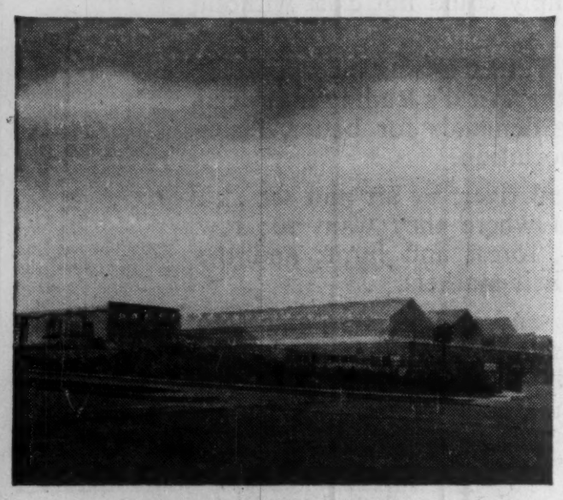
June 27, 1960

We recommend that warrant holders take up the new shares to which they are entitled. On your behalf we will arrange to exercise rights, sell rights and buy rights or shares.

Equitable Securities Canada Limited
60 Yonge Street, Toronto 1
EMpire 6-1141
Montreal Hamilton Kitchener

CONSERVATION GRANTS

The Canadian National Sportsmen's Show and the Canadian Boat Show have granted $119,468 to conservation organizations and projects throughout Canada in past year. Since start of the Sportsmen's Show in 1948, total of $643,381 has been distributed for conservation, bursaries, scholarships and research.

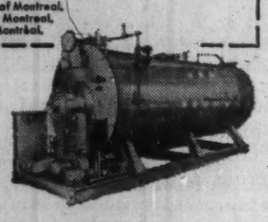


PACKAGED POWER*
VOLCANO

LOUIS DUPIRE MUNICIPAL GREENHOUSES
Montreal, Que.

The vast, new greenhouses at Montreal's Forestry Centre, adjoining the Botanical Gardens, were named after the late Louis Dupire, noted Montreal journalist and horticulturist. They will supply the city's parks and civic functions with over 300,000 plants and cut flowers yearly. The Centre is heated by two 300 H.P. Volcano Starfire automatic high-pressure steam boilers.

Plans & Specifications: Dept. of Public Works, City of Montreal.
General Contractor: Omega Construction Limited, Montreal.
Heating Contractor: Montreal Plumbing Limited, Montreal.



* Starfire Automatic Boilers Reduce Costs and Breakdowns
- Combination boiler and oil-or-gas firing unit — 9 H.P. to 500 H.P.
- A complete unit — compact design — easy to install.
- No foundation or large chimney needed (requires only vent pipe to clear surrounding building)—connect to steam, water, fuel and electric lines—and it's ready to operate.
- Economical.

More than a century of specialized experience
VOLCANO LIMITED
8635 St. Lawrence Blvd., Montreal, Que.
Works: St. Hyacinthe, Que.
Branches: Toronto • Quebec City
Sales and Service Representatives in all principal cities

CANADA'S LEADING MANUFACTURER OF AUTOMATIC HEATING EQUIPMENT

Appliance Market Called 'Chaotic'

Dealer asks manufacturers for help to control markets, improve retailers' services . . .

How serious is the lag in appliance sales this year?

- **A trade estimate** places the total drop at around 20% in first five months.
- **Sales of major appliance products** through department stores were down about 4% in first quarter (FP, June 11) but slid by over 13% in April.
- **Manufacturers generally agree** there has been a substantial inventory build-up this year.

What's the reason? What can be done about it?

A prominent appliance retailer has whacked the industry hard over what he calls "lack of control by manufacturers in the marketing process."

It is this lack of control — and disorderly marketing — which is chiefly responsible for the sales drop, Ray Keelan, a Sarnia, Ont., appliance retailer, told a marketing seminar of the Canadian Electrical Manufacturers Association.

He is an official of two leading retail associations in the field.

The industry "has been guilty of the most disordered, chaotic distribution pattern to be seen in the entire marketing field," he said.

There is unrest at the dealer level because he is not making money, the quality of retail personnel is dropping and the business is not attracting high calibre men with capital.

Retailers are urged to operate modern stores, provide parking, offer service of various kinds but, says Keelan, they see dealers around whose praise is being sung by the manufacturers but who offer none of these services.

These "low gross operators or discounters" are not penalized for making less contribution to the manufacturers' product — instead they are subsidized with better prices and more generous advertising allowances, Keelan says.

Results of the current "marketing failure" which he sees:

- **National brand manufacturers** and their retail outlets have failed to keep pace with makers of private brands and their outlets — the department stores.
- **Appliance sections** of our department stores have doubled their share of the market from 1941 to 1959.
- **Last year, they sold 26%** of all appliances, television and radios marketed in Canada.
- **By 1963, they may be selling** about 33% of the total appliance market.

"You (the manufacturers) must help us attain the same degree of control in our market areas that department stores have with their own brands in their market areas.

"You must decide whether you are going to market through supermarkets, discount houses, your own controlled stores or through independent retailers. And you must decide what services are to be offered by the retail outlet."

What's coming in the 1960s?

Keelan sees little hope of an immediate change in marketing policies.

- **There will be "continued hardship"** at the retail level, particularly among the smaller dealers.
- **There will be more failures** and more bankruptcies.
- **Private brand marketing** will continue to take advantage of the situation, and will take a bigger slice of the market.

But eventually, there will be change, he says.

In non-metropolitan market, distribution will be through one-line dealers who will control the product in that area, in co-operation with the manufacturer.

In metropolitan market, there is more likely to be centralized marketing, perhaps one central retail headquarters to handle warehousing and delivery, sales training, credit management and instalment credit service, advertising and promotion.

Retail outlets would be manufacturer-controlled though not necessarily owned, with control exercised by franchise or by some financial holding of stock in the outlet.

There would be uniformity of name and store design.

Steel Scrap Prices Dive

Steel scrap prices have dropped to the lowest levels in six years.

Wholesale dealer buying prices in the Hamilton market area were cut a further $3 a ton (net) this month on No. 1 grade scrap and $2 a ton on No. 2 grade.

The lower price reflects the generally easing demand for steel and lower operating rates in the basic steel industry (78% of capacity at latest report).

With the traditionally slower vacation months coming up, scrap dealers don't look for any pick-up in demand, and possibly prices, until after Labor Day.

Canada Bread Options Property

An option to purchase **Canada Bread Co.'s** plant at Danforth and Greenwood Aves., Toronto, for $700,000 has been granted to **Perpetual Investments Ltd.**, Toronto.

Canada Bread officials told FP that no firm deal for the sale has been made yet. The option remains in force into this summer.

The bakery firm's operations at this plant will be relocated but details have not yet been made final.

Montreal Races Toronto For Cultural Leadership

Montreal is threatening to pass Toronto as a Canadian cultural centre because it enjoys a more progressive policy of public support for creative activity, F. S. Chalmers, president of the Canadian Opera Company, said this week.

Mr. Chalmers told the opera group's annual meeting that the Montreal Council of Arts, since 1957, has been able to grant a yearly average of about $200,000 in subsidies to some 40 artistic organizations from funds allotted to it out of sales tax.

Metropolitan Toronto Council was authorized to make annual grants of up to $250,000 a year to various organizations, but these grants include "a variety of worthwhile and excellent institutions in no way connected with the creative arts", he said.

Of $202,000 in grants made by Metro Toronto in 1959, only $108,000 went to cultural activities in Toronto.

Chalmers suggested Metro Toronto "should get provincial authority to establish a separate fund for support of non-profit cultural and artistic groups, a fund quite distinct from any fund set up to cover grants for health and welfare organizations, mayors' conventions and Canada's participation in the Olympic games."

Montreal was also getting greater support and inspiration from the provincial government than Toronto.

Ontario made some generous grants but the province "should have a well-defined plan" and there should be a provincial fund of, say $500,000 a year to be distributed annually by a grants committee of the cabinet and "suitable private advisers".

In addition to Quebec, provincial grants to artistic and cultural organizations were made by Alberta, Saskatchewan, Manitoba and Nova Scotia.

The Canadian Opera Association — its name was changed this year from Opera Festival Association of Toronto — was established to develop a Canadian repertory opera company and to employ Canadian artists and provide them with a livelihood in their own country.

This year the company will present Verdi's "Otello", Mozart's "Marriage of Figaro" and Johann Strauss's "A Night in Venice" at the Royal Alexandra Theatre in Toronto Oct. 12-29.

After the Toronto performances a touring company will make its fourth annual tour, presenting 39 performances of Nicolai's comic opera "The Merry Wives of Windsor" in Ontario and Western Canada.

Early in 1961, the company will make another tour with Offenbach's "Orpheus in the Underworld" through southern Ontario and the Maritimes.

Eastern Gas-Oil Directory Ready

Eastern Gas & Oil annual and directory is off the press.

The 114-page issue contains an extensive directory of active firms in Eastern Canada's oil and gas industries, and a map section showing the main oil and gas producing fields in Ontario and oil and gas lease areas in Quebec.

Price is $15 a copy, **H. L. Akins Publishing Co.,** Box 37, Port Credit, Ont.

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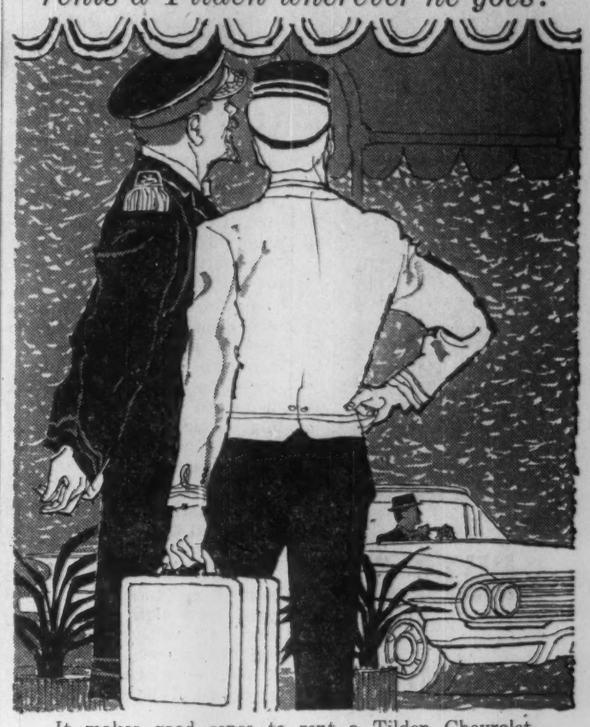

It makes good sense to rent a Tilden Chevrolet wherever you travel in Canada. And by reserving through your local TILDEN man, you can *arrange in advance* to have a car waiting for you just about anywhere in the world.

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The CANADIAN Name in World-Wide Car Rentals

a 2 million dollar smile!...

At first glance you'd believe that this man and the members of his committee had just made that much money. But no . . . they've just *spent* 2 million! Why the smile? Because, in letting the contract they know they have put themselves in the hands of a company they can trust.

The company was one of the Canada Iron Group. Could have been Dominion Structural Steel, Pressure Pipe or one of nine others. But whichever it was, these men *know* there is a record of reliability behind it. They know they'll get *full value* for every dollar spent with the Canada Iron Group.

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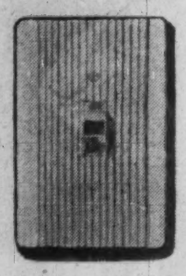

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Parliament's Business

By FP's OTTAWA STAFF

Coming: A Long, Hard Summer

WE CAN LOOK FORWARD, I believe, to a very active and I hope constructive summer." This was the way Opposition Leader Pearson greeted the prime minister's announcement this week of the business yet to be completed by the House of Commons.

On Mr. Pearson's count there were already 10 or 11 pieces of government legislation at various stages of consideration by the House. Mr. Diefenbaker had just listed seven or eight new bills, including the so-called Bill of Rights, which had still to be introduced.

The estimates of one department — agriculture — had been passed: all the rest were yet to come.

In addition, Mr. Pearson pointed out, the House had many committees still at work, some of which had barely started, and one — on broadcasting — which wasn't even appointed. (That came later this week.)

"I mention this", he said, "so that no one will be in any doubt as to the amount of time that will be required . . . "

The CCF group is holding out for a summer adjournment with a resumption in the fall to finish the business.

But Mr. Diefenbaker spoke of carrying on "a continuous session", and declared with a dead-pan air: "All I can say is that I like Parliament to be sitting because it is very helpful to get the views of honorable members and to understand the the thinking of Canadians as a whole".

The session has now lasted five months, with time out for a ten-days' recess at Easter. It has already extended its sitting hours to a full 7½ hours a day five days a week, spread between 11 a.m. and 10 p.m.

One day this week ten House committees were also trying to meet: the next day seven. They try to get in an hour or more before the House opens, by starting at 9.30 a.m. But many of them also find they have to meet in the afternoon while the House is sitting. It is a ruinous pace for MP's.

Canadian governments have never been good at arranging the work of the House of Commons. For years they have not had all their legislation ready until well on in the session. But the 1960 session undoubtedly marks a new low.

Extension of sitting hours usually marks the entry into the home stretch. It is meant to be a final cleaning up of business, on the assumption that most of the important and contentious items have been dealt with.

This year the House has run into the home stretch and extended its hours when it is still appointing new committees, when departmental estimates have hardly been broached, and when the major items of legislation have not been completed and some have not even been introduced.

* * *

LAST WEEK the House completed discussion of the finance minister's amendments to the customs tariff, the estate tax and the excise tax.

The longest discussion was about the amendment to the sales tax rules about "usual coverings". An amended version of the new formula was introduced, and Mr. Fleming explained the general principle.

It was, he said, that usual coverings or containers used with goods exempt from the sales tax should themselves be exempt if they are used just once in delivering the goods to the consumer. But if they were used repeatedly, returned and refilled, then they must still pay the tax.

But there was an exception for food coverings — crates and boxes for fruits, vegetables or eggs, and milk bottles or cans— which were exempt even if returned and used over and over again.

One of the principal objections raised was to taxing propane gas containers; but Mr. Fleming said they fell clearly into the category of returnable containers for repeated use, and he would not give way.

* * *

DEBATE WAS OPENED on the estimates of the Department of Citizenship and Immigration. Mrs. Fairclough enunciated a list of the advantages of immigration to Canada, and said the government had been making a careful review of immigration policy since 1957.

They had been looking for basic principles on which to build a national policy. They were now nearly ready to make specific proposals which would translate principles into law.

Mr. Pickersgill, the former minister of immigration, claimed that Mrs. Fairclough's principles were indistinguishable from the former Liberal government's: and he said no fundamental change had been made in any respect since the Conservatives took office.

There was a good deal of discussion about the recently-revealed racket surrounding the immigration of some Chinese from Hong Kong; but both government and opposition spokesmen insisted that there was no reflection on the Chinese community as such.

Company Reports

Mining

IRISH COPPER MINES had a net loss of $1,006,588 in 1959. This is the first full year of operations for the company's operating subsidiary, **St. Patrick's Copper Mines.**

President S. A. Perry reports that in the first quarter this year, a modest operating profit was earned.

The loss last year reflects underground difficulties which forced abandonment of many stopes above the 995-ft. level. Production was further interrupted by heavy development work to prepare lower stopes for mining.

A total of 917,651 tons of ore were milled in the year averaging 0.73% copper. In the first quarter this year grade has been improved to 0.85% copper and company expects it to reach 1% in the last quarter.

Operating costs were $2.82 per ton reflecting high milling costs as result of underground difficulties.

Ore reserves are estimated at 18,952,000 tons grading 1.109% copper, with lead and zinc values. A total of 1.7 million tons were abandoned from reserves on upper levels.

Plans to boost mill capacity to 7,500 tons a day were dropped and target now is 4,000 to 4,500 tons daily.

Arrangements were made to borrow up to £550,000 for operations. To date £450,000 has been borrowed. Under terms of the agreement, 120,000 shares of St. Patrick's were transferred to the lender, reducing Irish Copper's interest to 80%.

CONSOL. INCOME ACCOUNT

Year Ended Dec. 31:	1959
Metal production	$2,381,963
Less: Operating costs	2,517,271
Operating loss	135,308
Less: Int. rec.	1,316
Add: Interest	251,277
Depreciation	451,804
Def. chgs. w/o	192,563
Loss sale assets	31,019
Cdn. exps.	78,493
Less: Min. Int.	132,585
Net loss & deficit	1,006,588
Shares o/s as at Dec. 31:	
Common, $1 par	4,870,667

CONDENSED CONS. BALANCE SHEET

As at Dec. 31:	1959	1958
Cash	$417,625	$352,690
Concent. settle.	219,003	97,236
Accts. rec.	47,511	34,850
Supplies	291,343	292,166
Total curr. assets	975,494	676,942
Def. accts. rec.	45,713	45,713
Preprod. exps.	*3,415,580	3,608,161
Def. devel.	114,936	
Excess cost subs.	339,999	559,999
Mng. rts. & props.	781,250	781,249
Fixed assets‡	5,168,819	5,352,445
Total assets	11,061,791	11,024,509
Total curr. liabs.	938,772	1,261,834
Long-term debt	4,951,579	6,990,294
Prov. conv. exch.	138,801	109,176
Min. interest	427,415	590,000
Capital stock	4,870,667	2,163,135
Contrib. surplus	751,145	
Less: Deficit	1,006,588	
‡After deprec. of	687,901	271,004

*After write-off of $192,581 in 1959.
Working capital .... 36,722 †524,942
†Excess of curr. liabs. over curr. assets.

Something for Everyone...

Fun for the whole family at The Algonquin!... supervised swimming at warm Katy's Cove. Tennis, shuffleboard, fishing, games . . . cool evenings for wonderful sleeping. Wide choice of accommodation, fine Canadian Pacific cuisine, complete freedom from hay fever. Opens June 23.

SPECIAL GOLF HOLIDAY
July 14 to 17
Low daily rates:
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American Plan (all meals included)
18-hole professional challenge course
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Special nightly entertainment

Information and reservations from any Canadian Pacific office, your own travel agent or write Hotel Manager.

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Another wise choice:
THE DIGBY PINES, Digby, N.S.
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A Canadian Pacific HOTEL

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Canada's well-being is founded on STEEL!

STELCO in the life of the transportation worker...

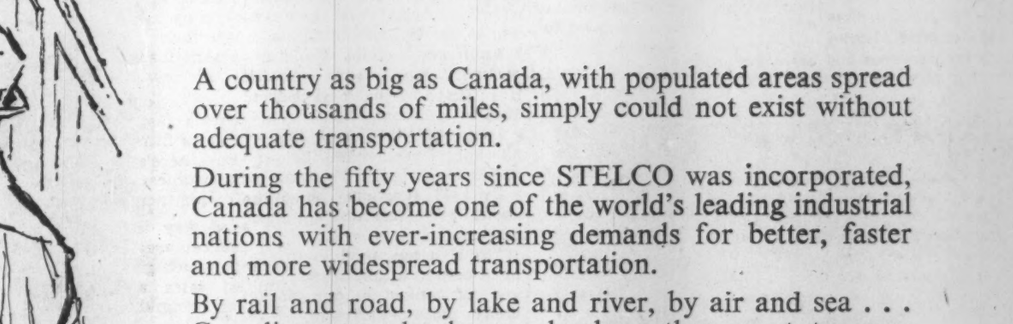
A country as big as Canada, with populated areas spread over thousands of miles, simply could not exist without adequate transportation.

During the fifty years since STELCO was incorporated, Canada has become one of the world's leading industrial nations with ever-increasing demands for better, faster and more widespread transportation.

By rail and road, by lake and river, by air and sea . . . Canadians travel when and where they want to; raw materials move from mine, forest and farm; and the products of industry reach their markets.

In this movement of goods and people, steel plays an important part. The nation's railroads, ships, trucks and other carriers are built with steel. More than this, the industries which produce the goods, employ the people and make the transportation necessary draw their strength from steel.

As Canada's leading producer of steel and steel products, STELCO pays tribute to the men who work in transportation. Their industry binds this country together as a nation.



Some 2,250,000 tons of iron ore and 1,700,000 tons of coal are shipped annually into Stelco's docks at Hamilton. Five unloading bridges such as these can handle the cargo of more than 450 ships a year, with a generous margin for future expansion.

Stelco now enters its second half-century with nearly 16,000 employees; 12 producing and processing plants; and with over 90% of its shares held in Canada.

50 STELCO YEARS OF PROGRESS 1910-1960

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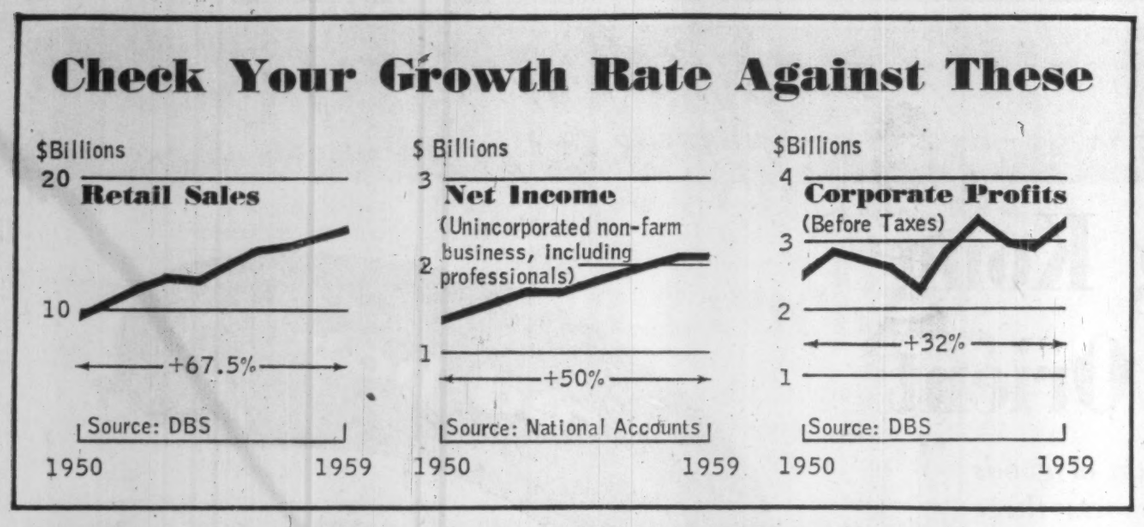


PART 2: MEASURING GROWTH

How to Raise and Use Money To Make Your Business Grow

Is your business growing fast enough now? Here's how to find out. You may be making more sales without really making more money . . .

By J. K. EDMONDS

How do you tell whether your business is a real "growth situation"?

If it has been growing steadily for the last five or 10 years—so has everything else. Unless you've been beating the averages, you may have trouble growing now.

If you've been beating the averages, what's the reason? Special circumstances in your line? Local conditions that may not persist? Sound management policies? It's important to know which, before you reach for more growth.

You can make a long list of ways to make a business grow, but they all break down into two groups:

- **Continuing** to do what you are doing, on a larger scale.
- **Changing** your products, your service or your methods to meet different market needs.

The first kind of growth is what you want if your business shows a satisfactory rate of growth, now and if the market conditions for your type of product or service are showing no signs of change.

The second type of growth is what you should aim for if you're not satisfied with your growth record, or if you can see prospects of growth that look more tempting outside your present field.

Your first move, then, is to check on the growth your business already shows. Are you growing fast enough now?

Sales is the figure often used to judge growth, but a sales figure can be misleading.

You may be making more sales without making any more money.

This is easy to do, if minor cost increases brought on by the extra business (extra overtime, for example) offset the extra profit you make on the sales.

When this happens—if you are increasing sales without increasing profits—you are only "trading dollars". Unless you can see ahead a point at which the new sales will begin to pay off, your business won't achieve real growth this way.

But even if rising sales are accompanied by rising profits, this may not be an indication that your business policies are making your business grow. You may merely be getting your share of a general growth, or you may be enjoying a windfall that results from rising prices.

To check your own performance, you need to know how your sales increases relate to what's happening in your line generally. For instance, if all food sales are rising 6% and yours rise 5% then you're not growing enough.

What happened to that extra 1%? Unless you're beating the averages—or unless special conditions are making it unusually difficult to meet or beat the averages—you shouldn't consider yourself a growing firm.

Those special conditions are important. If a torn-up street makes it impossible for customers to reach your retail store, you're not going to make the sales you need to beat the averages. If the street tie-up is in front of your competitor's store, you'll get a windfall. You can't take blame or credit for either of these sales changes.

One of your advantages, as a small businessman, is that you are close enough to your day-to-day operation to spot these special conditions, and keep them in mind when you're interpreting your sales record. You don't have to wait for someone to write a report. You do have to remember to link these conditions with your sales figures, though, when you're starting to plan for growth.

What about growth in the assets of the business? Can this be used as a measure of performance?

Not by itself. The higher assets may be offset by a rising burden of debt, or you may be piling up too many assets without increasing your revenues. The assets should eventually lead to rising sales and higher profits.

A better measure of growth is the increase in the net worth of your business. Net worth is what the business owes you and any other owners of the operation. It's what's left over after you deduct from the assets everything you owe to your suppliers, the banks, finance companies, and other creditors.

Net worth, to begin with, is what you put into the business. It grows if you make profits and plow some of them back into the business. It shrinks if you make no profits, or if you milk the business of every nickel it makes. If your business is really growing, the net worth should be growing too.

Since the whole point of the enterprise is to make a profit, your net profits should grow as your business grows, and especially as your net worth grows. The number of dollars net profit for every dollar of net worth of the business is one of your best measurements of business performance. It shows you the return you are making on the dollars you have risked to get into business.

If you aren't in the long run making a return of at least 6c for every $1 of net worth, you aren't getting a reasonable reward for the risk.

Your sales figures, your profit figures and the growing worth of your business may convince you that you're on the right track and all you need is to keep on with what you are doing on a larger scale.

Before you enlarge your plant or store, or add another unit, you'll need to check on market conditions. Can you find customers for your increased output? Where are they going to come from? Will you attract new customers if you add to space, staff or inventory? If there's room for expansion in your market, what are the prospects for other firms moving into your present market or competing with you for the new customers you plan to serve?

In today's fast-changing market, it's hard to get a firm answer to these questions. But there's no point in planning for growth unless you are convinced you can sell your increased output.

A good way to start is by checking your market area in the **FP** Survey of Markets, which gives facts and figures on families, sales and buying power in Canadian communities.

If you can see an expanding market for your present product or service, and if you're satisfied that the policies you've been following have led to better-than-average growth, then you know the type of expansion you want to undertake.

If you decide that the prospects are better in some other line, or if you're not satisfied with your present growth record, you'll want to look for new ways to make your business grow.

Next week: Looking for Ways to Grow Faster.

Author of this series, J. K. Edmonds is a contributing editor of FP and a graduate economist who has had considerable experience, in both practice and in writing, in the problems of small business.

What the man said:

Our export trade will gain if Canada gets together with other nations on industrial standards . . .

HENRI GAUDEFROY, dean, Ecole Polytechnique, Montreal, speaking to the 33rd annual meeting of the Canadian Standards Association:

* * *

Canada today is playing an important role in international affairs. As a leading member of the British Commonwealth of Nations and through its daily dealings with the U.S., it is placed at the crossroads of international communications.

Its position is unique and no effort must be spared to benefit from it.

Canadian Standards Association is already active in the field of international standards through its membership in ISO and ABC and in the Commonwealth Standards Conference.

It is also operating local Canadian inspection teams in some foreign countries. This is all to the good.

I merely want to emphasize the importance of this phase of CSA's work, due to its impact on the development of our export trade.

We will gain all the more in this vital field, if by sound policies both nationally and internationally, we manage to reduce the discrepancies between our own standards and the international standards, which are now in the process of being established.

This may be achieved provided we put forward our views adequately, at the international level, in order to advance our own concepts on standards and if, at the same time, we are clever enough to adjust our thinking, when necessary and advisable, in order to meet other nations viewpoints.

Through all of its many ramifications, the field of standards has a very definite bearing on the economic welfare of our society.

CSA has therefore a serious commitment toward Canada and Canadians.

CSA operates on a free enterprise basis.

Industry, large and small, all individuals associated with our industrial life, our various governments and government departments and also the public, should give increased support, financial, moral and otherwise, to the Canadian Standards Association for the development of a strong unified policy on standards.

Alberta Drinkers Set Record With Sales of $36.3 Million

From Our Own Correspondent

EDMONTON — Liquor sales in Alberta in 1959 reached a record total of $36.3 million.

In the previous year, the gross sales total was $34.4 million.

The 1959 total included $964,375 in sales by the Alberta Liquor Control Board to licensed lounges or cocktail bars in hotels and restaurants.

This represented 2.65% of the board's sales.

George A. Clash, chairman of the board, says the licensing of dining and cocktail lounges in Alberta has not increased the consumption of liquor to any great extent.

The consumption of liquor actually constituted a small part of the business of the lounges.

In the past year, liquor sales in the 49 established outlets or lounges amounted to about $3.2 million.

Food sales, by comparison, amounted to slightly less than $7.5 million.

During the year, food sales for the lounges increased from 20% to 25%.

Starting Oct. 1, Alberta beverage rooms will be equipped with new size beer glasses.

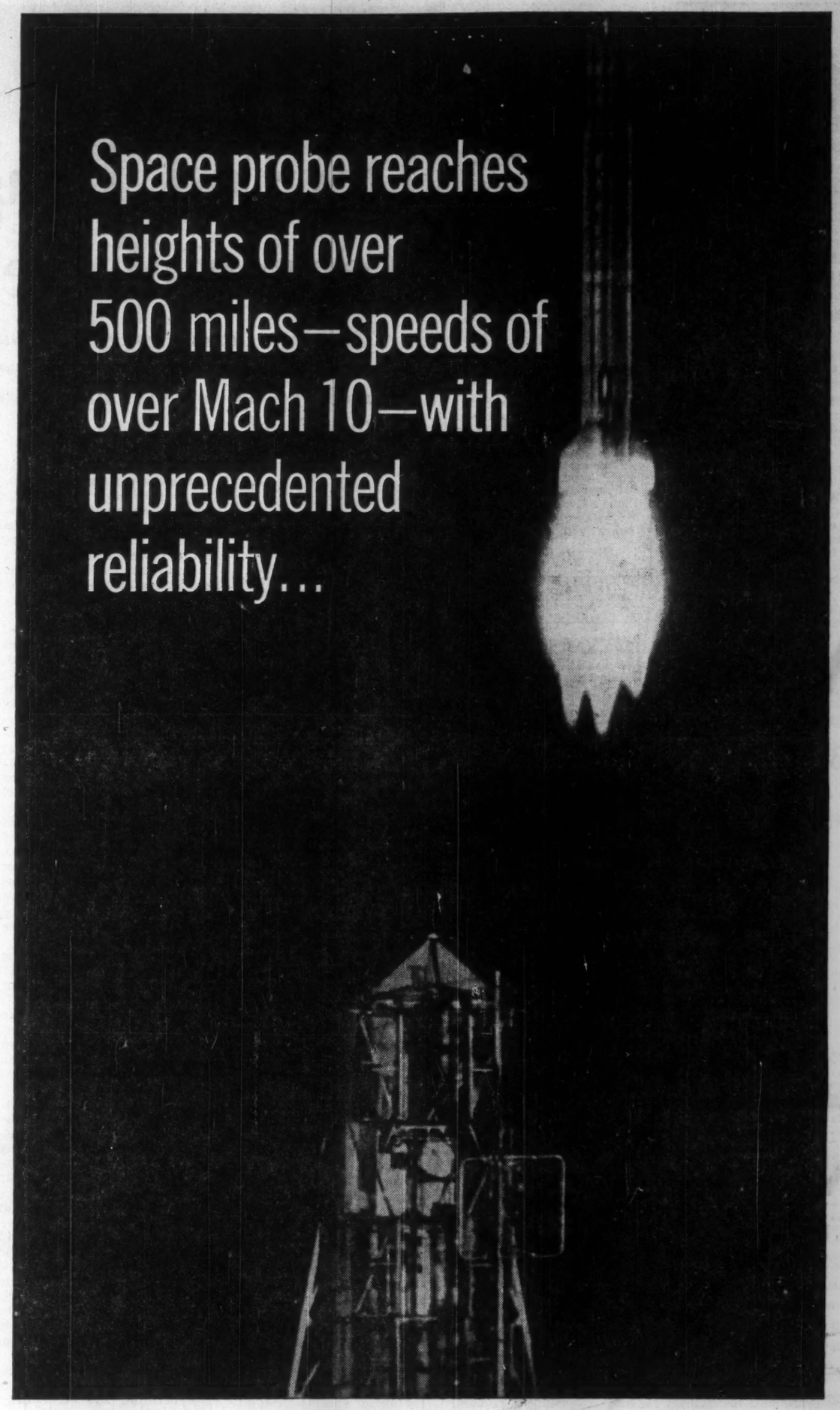
The new glasses will have capacities of 7 oz. and 14 oz. but quantities served will remain at 5½ oz. and 11 oz., respectively.

There is no change in price 10c for the smaller and 20c for the larger glass.

The new beer regulations were necessary because the volume of beer per glass varied owing to the difficulty of making proper servings during peak or rush hours of business.

Imported beer, ale and stout sold in Alberta during the past year totalled 9,257 Imperial gallons. The domestic volume totaled 16.2 million gallons.

During the past year, 11 new hotels have been built in Alberta at a cost of $4 million.



...AND BRISTOL SIDDELEY SUPPLY THE POWER

One of the largest manufacturers of motive power units in the world, Bristol Siddeley Engines Limited produce the Gamma. A liquid propellent rocket engine, the Gamma powers the Saunders-Roe Black Knight, Britain's highly successful space research vehicle. An extremely reliable powerplant, the Gamma produces a total sea-level thrust of 16,400 lb (7,438 kg) and nearly 19,000 lb (8,618 kg) outside the earth's atmosphere, for a total powerplant weight of only 700 lb.

The Gamma has sent Black Knight over 500 miles into space at speeds in excess of Mach 10 with a reliability that is unprecedented. For, to date, the Gamma has never failed to fire successfully.

Since Bristol Siddeley's rocket division began work in 1946, it has developed a wide range of components. By combining these components in single or multi-chamber layouts, thrust requirements from 500 lb up to 100,000 lb. can be met.

BRISTOL SIDDELEY ENGINES LIMITED

BRISTOL AERO-INDUSTRIES LIMITED, 200 INTERNATIONAL AVIATION BUILDING, MONTREAL 3, CANADA. TELEPHONE: UNIVERSITY 6-5471

The Bristol Siddeley Orpheus, the world's most advanced lightweight turbojet engine, powers this Fiat G 91 strike fighter (chosen by NATO). The Orpheus is already in service in 6 different aircraft, is specified for 8 others.

Bristol Siddeley Maybach diesel engines power Britain's fastest express train—the British Railways "Bristolian." Two type MD 650 engines, developing a total of 2,200 hp, give the "Bristolian" a top speed of over 90 mph.

The Bristol Siddeley Proteus powers the Britannia airliner. Four Proteus give this 130-seat aeroplane a speed of over 400 mph—a range of over 5,000 miles. Britannias are in service with twelve airlines and with RAF Transport Command.

CANADA

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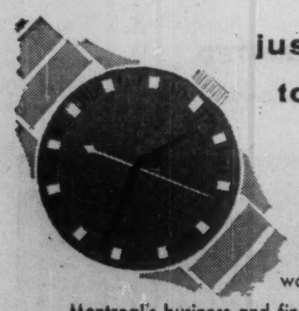

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POST TRAVEL BUREAU

Where to go—how to go—where to stay

'Low Cost' Hong Kong Wonder of the Orient

Last year, Canada bought $13 million of goods from this tiny colony, which supports three million people on one natural resource. How do they do it?

By BERNARD HARRISON

Mr. Harrison, who now lives at Merritton, Ont., was U.K. trade commissioner in Hong Kong 1952-1959.

Hong Kong "has nothing to recommend it, if we except the excellent harbor", said the London Times of Dec. 17, 1844.

Today, except to those overseas industrialists suffering from its competition, Hong Kong has a great deal to recommend it.

Its one million refugees must certainly think so, and any 20th century tourist would decide that the Times must have been writing about some place else.

An unforeseen outcome of Hong Kong's century of economic development has been its elevation to the shiny brochure class of "tourists' paradise".

This little British Crown Colony is only one ten thousandth the size of Canada, but, with no natural resources except for that "excellent harbor", it today supports a three million population.

The prescription for success:

Good government; a sound banking system with reasonable interest rates; an industrious people; no national discrimination; and, of course, that superb harbor.

Today there are half as many refugees as non-refugees among Hong Kong's three million, 99% Chinese, population.

The prospect of providing housing, work, public utilities, medical facilities and education for so many newcomers would have made many a government blench.

Over the last 10 years Hong Kong's budget, now $100 million, has been doubled to keep pace with this "re-settlement" problem.

What, then, replaced the old import and re-export business, and why is Hong Kong today as prosperous as ever?

The Chinese have always been magnificent craftsmen, a nation of virtuoso carvers of jade and ivory, and of brilliant needlewomen.

But the entire world demand for these products could not have been made to support the whole of Hong Kong's economy, and that, at the drop of a hat.

Fortunately, a number of the refugees had been successful industrialists in pre-Communist China and brought with them, some, finance, and all of them, badly needed skills both in production and management.

That is the open secret why Hong Kong is already 70% an exporter of her own products, whereas in 1948 the figure was only 15%.

In 1959 exports of Hong Kong products were valued at $380 million.

These were mainly textiles, and garments, enamel and aluminum holloware, footwear, plasticware and toys, but there are a host of other local products from flashlights to iron bars and beer.

Her invisible exports, of undisclosed amount, include shipping, ship building and repairing, the latter fed by seasonal typhoons, aircraft maintenance, banking, insurance and, on an ever-increasing scale, tourism.

Imagine being a tourist, or better still, a tourist's wife, in a spot where almost everything (liquor is an exception) is duty and sales-tax free.

The surroundings—the Times of 1844 to the contrary—are as near heavenly as most of us are ever likely to see.

To its one exception the Times should in all fairness, have added, a delightful winter climate.

And, today, with air conditioning, the summer climate, even though Hong Kong is just within the tropics, is quite bearable.

Many stores, the hotels of course, and some of the factories are air-conditioned.

Tropical sea bathing must be an ambition of most of us. There you can enjoy it, and the whole Colony is the answer to any color-photographer's prayer.

Such things, together with the unforgettable Chinese cooking, have made possible the official pronouncement that tourism is, "one of the factors which enable the Colony to continue to maintain so large an adverse balance of visible trade without apparent detriment to the economy".

For 1959 this adverse balance was $279 million — $625 million imports and $546 million exports.

During 1959, the exports of Hong Kong products totaled $380 million in value, but yet, the growth of industry has, strangely enough, left the scenic beauty of the Colony practically intact.

One great asset of this mountainous sea-girt Colony is that the hills can be readily demolished and thrown into the sea to provide additional level ground by reclamation.

The new airport runway, built for jet traffic, was reclaimed from the harbor by this means.

For industrial development the government provides these level reclaimed sites at a cost which is low considering the shortage of suitable land and the expense of reclamation.

For small concerns they are available at as little as $1 sq. ft., but with subsequent speculation prohibited.

However, probably one of the greatest helps towards the development of industry has been the government's determination to keep the earnings and profits tax down to 12½%.

Given this opportunity for plowing profits back into the business, and assisted by its enterprising banking system, Hong Kong has witnessed some lightning growth among factories which started only a few years ago with next to no capital at all.

The hardest thing in the world is to find out what a Chinese businessman is worth.

Even the bankers have, to some extent, to rely on their long-standing knowledge of the man and his family, probably starting with acquaintance with them years ago in China.

Capital is seldom drawn from the public, but is acquired from partnerships, and occasionally, from loans from "overseas" Chinese.

Few factories are actually controlled from abroad, but more and more today depend on large advance overseas orders to take all or most of their total production.

It is unfortunate that, just now, overseas buyers are unintentionally encouraging Hong Kong factories to put their own corresponding home industries out of business.

But the Chinese businessman, manufacturer or merchant, is a very energetic salesman himself and in this he is ably abetted by the Department of Commerce and Industry of the Hong Kong Government.

They, together with the "foreign", i.e. non-Chinese, business community, send to all corners of the earth a continual flow of individuals, missions, literature and exhibitions.

China is still Hong Kong's biggest source of supplies. She draws a great deal of her food from there.

China also sells to Hong Kong cotton yarn and textiles in great quantity, coal, newsprint (1959, $1.34 million), and some of the materials, e.g. cement, glass, bricks and sanitary ware, for Hong Kong's building boom. But most of the raw materials for local industry come from the West.

For one reason, many of Hong Kong's export markets are still in those parts of the Commonwealth where Imperial Preference Tariffs give great advantage, provided that Commonwealth raw materials are used.

This gives Canada a pull with raw materials for the plasticware, enamelware and aluminumware factories.

For most commodities, the Hong Kong market is about as competitive as can be found anywhere today.

There are however no currency difficulties because Hong Kong has always maintained a "free" currency, and for that matter, a quota-free, market.

In 1959, Canada's purchases from Hong Kong at $13 million, were 50% above the 1958 figure. Most of the increased purchases were from Hong Kong's domestic industries, made-up textile items, gloves, flashlights, plastic manufactures, toys and wooden furniture. It is true that Canada had an imbalance of visible trade with Hong Kong but she also has invisible earnings accruing from shipping, insurance and airline interests. Added to which in recent years the Canadian stock market has had a great fascination for Hong Kong investors.

Those items which Canadians buy from Hong Kong are mostly products of industries where the costings have a relatively high labor content.

The wages of daily-rated skilled workers there range between $1.15 and $3 a day (end-1959 survey).

In many factories there are additional fringe benefits, and it is difficult to compare these figures directly with those in the Western world.

For one thing there are no heavy heating bills in this balmy climate.

The same consideration limits the cost of clothing, most of it cotton, where, even in the colder weather, a freeze is almost unknown.

Many Hong Kong factories are examples in almost every respect, of good modern practice, good buildings equipped with modern machinery and operating under good working conditions.

For Canada, Hong Kong is a small (1959, $11.33 million), highly competitive, but still unsaturated market.

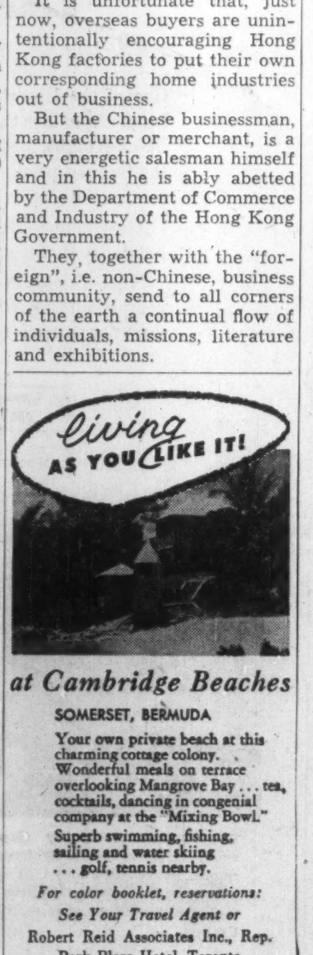
It is the gateway for trade with the mainland of China, as well as with other Far Eastern countries with less highly developed trading and shipping facilities than Hong Kong.

It is an unrivaled and up-to-date source of information about business, or for that matter, politics, in the Far East.

It is, moreover, a good centre for the interpretation of this material, which is one reason why so many foreign correspondents gather there.

The name of Canada has a special significance in Hong Kong where everyone remembers with admiration and gratitude the Canadian defence of the Colony in 1941.

Altogether, Canada's associations with this tiny British Colony — by itself a Far East in miniature — are very satisfactory, but undoubtedly are capable of profitable development.



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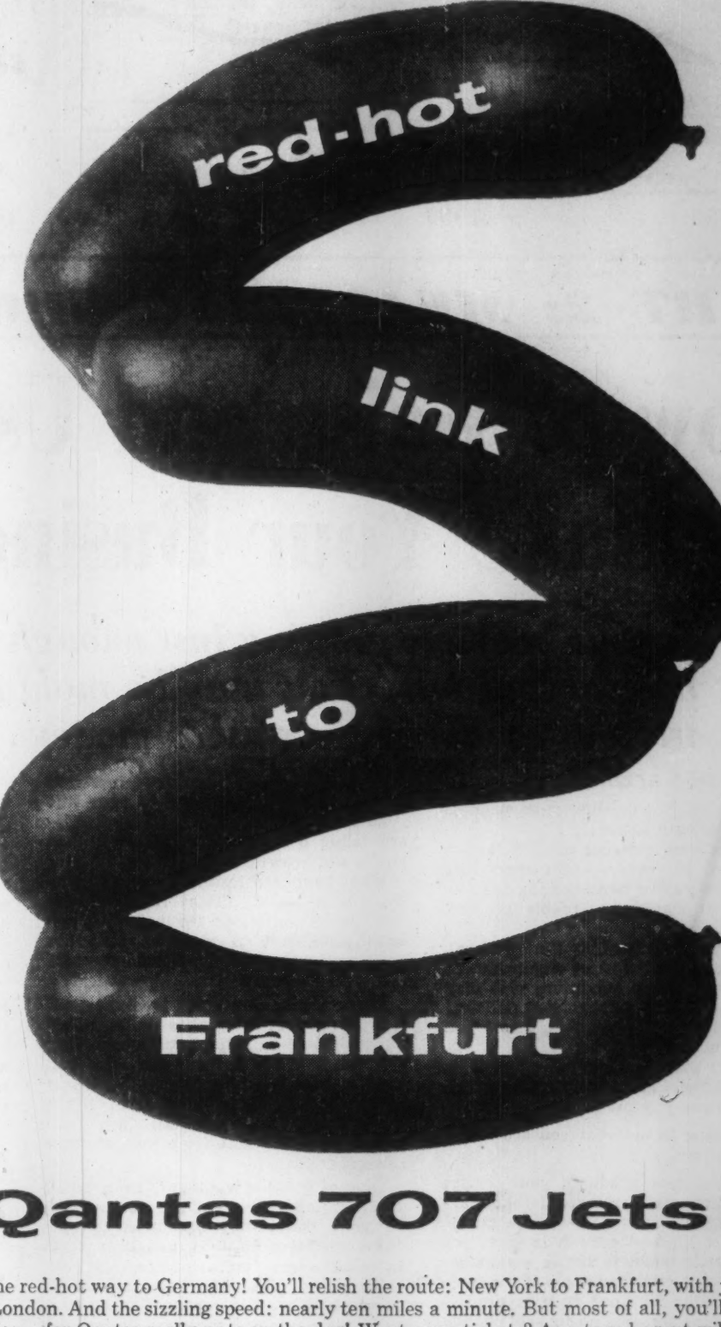

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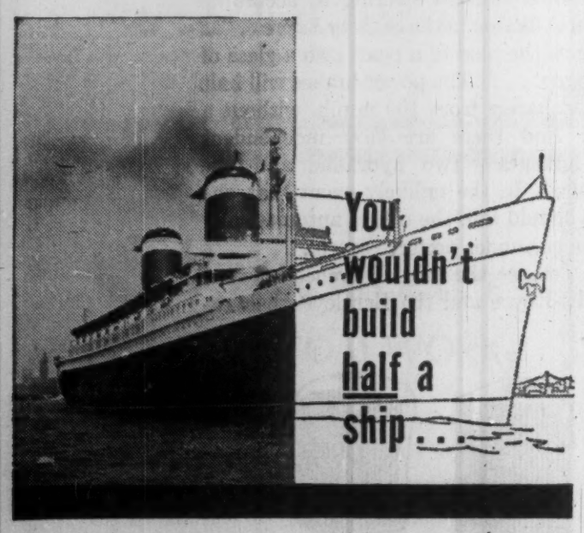

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Railways Get 'Green Light' In Trucking

This might mean a revolution in highway transport — and the end of many independent truckers . . .

MONTREAL (Staff) — Canada's railways apparently have received a government green light for large-scale expansion in the trucking business.

This could lead to revolutionary new developments in integrated freight handling across the country.

It might, too, mean a virtual death blow to many of Canada's independent long-distance truckers.

That was the glum conclusion of the highway operators this week following the announcement that **Canadian National Transportation Ltd.** — a division of **Canadian National Railways** — had completed stock purchase agreements with four trucking companies. The deal adds 15,000 route-miles in seven provinces to CNR's highway operations.

The companies involved:

- **Sydney Transfer & Storage Ltd.**, of Sydney, N.S.

This provides interprovincial routes between Nova Scotia and New Brunswick, and inter-city routes between Sydney, New Glasgow, Halifax, Moncton and Saint John.

Company has 60 units operating over 1,100 route-miles.

- **Eastern Transport Ltd.**, of Truro, N.S.

Roughly the same size as Sydney Transfer, company operates interprovincial and intraprovincial service between Halifax, Truro, New Glasgow, Moncton and Saint John.

- **Empire Freightways Ltd.**, of Saskatoon, Sask.

Company operates services in Northern Saskatchewan, including Saskatoon, Prince Albert, Melfort and North Battleford and between these points and Winnipeg. Empire has 115 units and 1,100 route-miles.

- **East-West Transport Ltd.**, of Winnipeg.

This is the largest of the group and has services to all major cities in Eastern Canada, with through routes to Toronto, Hamilton, Windsor, Sarnia and Kitchener. Its 140 units connect Vancouver, Calgary, Edmonton, Saskatoon, Regina and Winnipeg.

In addition to these companies, CN Transportation has also taken option on **Midland-Superior Express Ltd.**, of Calgary, which has services from Alberta, through Ontario and into Montreal.

Canadian National had been working two years on these purchases under maximum conditions of secrecy. When word leaked out earlier this year that it was negotiating with Midland-Superior, the trucking industry let out an angry yell (**FP**, April 2).

Industry spokesmen announced that they would do all they could to block the proposed purchase. A letter of protest was dispatched to Transport Minister Hees arguing that it was not in the public interest to let the railways move further into trucking.

The minister, however, did not agree. With CNR losing money, Ottawa seems ready to give it a freer hand in the search for profits.

Transport observers see this as a major victory for Donald Gordon and his CNR officers. They have argued long and hard that to be efficient under present conditions the railways must be allowed to integrate their services — and that means owning and operating a powerful trucking arm.

But the independent truckers have a reputation for being politically powerful. No government — either federal or provincial — has been anxious to appear to be handing their industry over to the railway giants.

"It means nationalization of part of the trucking industry," one trucker grumbled to **FP** this week. "Trucks gave the public such good service that now CNR has to take our business away. It shouldn't be allowed."

That sentiment promises to be aired frequently next week when the truckers meet for their annual convention in Ottawa. The meeting will be one of crisis.

Privately the truckers concede that, while they will do all in their power to block the CNR purchases, they have already lost the fight. They are bitter, too, about companies that have "sold out to the enemy".

One director of the Canadian Trucking Associations, who as recently as last January was campaigning vigorously to stop railway infiltration of the highways, won't be attending next week's meeting — his is one of the companies sold to CNR.

Officially CNR isn't talking about any further expansion plans. "We have announced all that we have to announce for the time being," a CNR spokesman told **FP**.

But betting is that CNR plans to expand at least to the size of **Canadian Pacific Railway's** highway operation.

CPR covers nearly 10,000 route miles coast to coast — 3,000 miles in Western Canada through **Canadian Pacific Transport Co. Ltd.** and two subsidiaries, and 7,000 mi. from Nova Scotia to the Manitoba border, operated by **Smith Transport Ltd.**

Bill Would Put Trucking Under Transport Board

OTTAWA (Staff) — A private member's bill which would bring interprovincial and Canada-U. S. truck traffic under the Board of Transport Commissioners has aroused wide interest here.

The bill, placed on the Commons' order paper by Gordon Chown, PC, Winnipeg South, would repeal the entire Motor Vehicle Transport Act under which nine provincial boards now regulate this truck traffic.

The bill has little chance of being debated this session, and doesn't stand a ghost of a chance of becoming law, at least in its present form.

It stands in 66th position on the list of private member bills. Time for private member debate will be so limited in the closing weeks of the session that not more than four or five of these are likely to be discussed.

The bill has attracted attention because:

- **It represents** the viewpoint of an important segment of the trucking industry.
- **To some extent** it parallels a proposal by the Canadian Trucking Association to the Royal Commission on Transportation. The association, which has produced its own formula for a federal "joint transport board" to regulate interprovincial and Canada-U. S. truck traffic (**FP**, May 21) took the trouble to repudiate the Chown bill.

An association press release said the Chown proposal wasn't backed by a majority of the trucking industry.

The bill could be debated next session if Chown puts it on the order paper again.

Many MPs would contribute to such a debate because truckers in every province have long argued that the arrangement created by the present Motor Vehicle Transport Act is inadequate and should be replaced.

The Transport department, which presumably watches over administration of the MVTA, has no group of officials designated to look after truckers' interests.

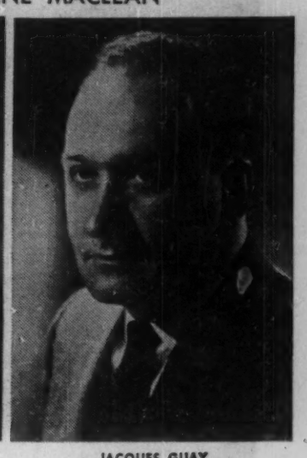
Interprovincial and Canada-U. S. truckers now handle some 126 million tons of freight annually, against 197 million by the railways. Because the average truck haul is much shorter than the average railway haul, the trucks' ton-mileage output is only 7% that of the railways.

Truckers have opposed, without much success, purchases of trucking firms by railway companies. These are now increasing.

ANNOUNCEMENT

SENIOR EDITORIAL APPOINTMENTS LE MAGAZINE MACLEAN

PIERRE de BELLEFEUILLE



JACQUES GUAY

The appointment of Pierre de Bellefeuille as Editor of Le Magazine Maclean has been announced by F. G. Brander, Publisher of Maclean's and its newly-formed French-language counterpart.

Jacques Guay has been appointed Associate Editor of this new magazine.

M. de Bellefeuille is widely known among French-speaking Canadians for his contribution to their cultural life. A graduate of the University of Ottawa, he began his career as a reporter for Le Droit. From newspaper work, he went to the Press Gallery in Ottawa, and later served at a news commentator and analyst for a number of French-language radio stations.

In 1951, M. de Bellefeuille became the Chief of the Editorial Services of the National Film Board. He soon advanced to Associate Chief of the Canadian Program Division. In 1958, M. de Bellefeuille was appointed Co-ordinator of French Distribution and continued as a radio and television commentator for Canadians of French expression.

M. Jacques Guay is well-known to the French-language community. He was formerly the Manager of Le Quincaillier, the oldest French-language trade paper in Canada, and previously edited L'Epicier and Le Pharmacien.

M. Guay also began his career as a newspaper reporter, but moved into the French-language network of the CBC as a news editor. When the French-language television network was established, M. Guay transferred to this new medium and helped establish the present system of news editing and broadcasting.

These appointments are the first of a series that will create for Le Magazine Maclean an independent French-speaking editorial staff based in Montreal that will pursue an editorial policy which will make the new magazine parallel in aim to Maclean's, but distinctly original in viewpoint.

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A guide to Rolls-Royce comforts and graces

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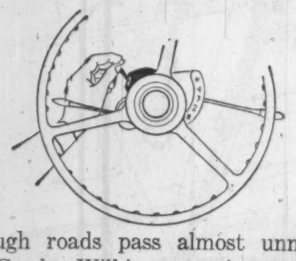
THE Rolls-Royce and its fraternal twin, the Bentley, are designed for people who are determined to live well while in transit. There are few *reasonable* desires which the owner cannot satisfy by pressing a button, pulling a lever, or flicking a switch.

For example, if the road surface is not to your liking, you can, in effect, change it. A switch on the steering column lets you adjust the shock absorbers to suit driving conditions. You harden or soften the ride at will.



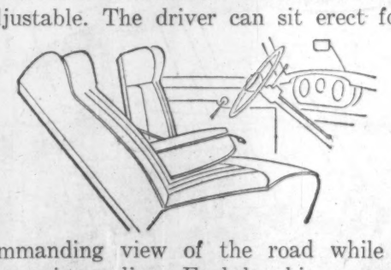
"Rough roads pass almost unnoticed," writes Gordon Wilkins, motoring correspondent of *The Observer*, "for they neither shock the occupants nor assail their ears with drumming noises."

If the noise from *other* cars distresses you, you can close the windows and still get fresh air through an efficient ventilating system. Within your Rolls-Royce, blessed silence reigns. You can converse in discreet whispers.

Three walnut picnic tables are among the

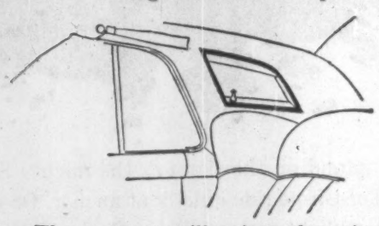
graces of the Rolls-Royce and Bentley. One slides out from the dash—an ideal place for a road map. Two others fold down behind the front seats. They make fine work surfaces upon which the children can rest their coloring books to keep them quietly amused on long trips.

The rake of the front seats is *individually* adjustable. The driver can sit erect for a



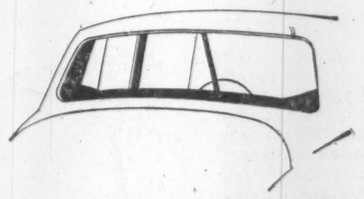
commanding view of the road while his companion reclines. Each has his own set of arm-rests which adjust to suit his fancy.

The seats are as cosy as club chairs. You *nestle* into them. They are covered with the same English leather used on seats in the British House of Commons. Eight hides are used — enough to make 128 pairs of shoes.



There are two illuminated vanity mirrors in niches in the rear quarters of the Rolls-Royce. Ladies may thus perfect their make-up in privacy before leaving the car.

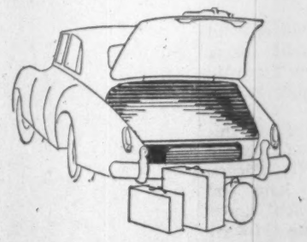
Much of the interior is surfaced with French walnut which has been hand-polished by English craftsmen. Notes are made on the hue and burl of the walnut used in each car, and are filed under your serial number. If a portion of the wood should ever be damaged, it can be matched flawlessly in grain and finish.



Here you see the rear window defroster. Or, rather, you do *not* see it. It consists of a heating element of 1,360 *nearly invisible* wires moulded into the glass—wires finer than a human hair. At the flick of a switch, mist and frost are cleared electrically.

The gas tank cannot be opened without the driver's consent. *You* unlock it electrically from a button on the dash. And you should never run out of gas. A green light on the instrument panel starts winking when your supply dwindles to the last three gallons.

Your luggage rides here in carpeted seclusion. It can never be soiled by the spare wheel, which occupies a *separate* compartment under the luggage. You can test the air pressure in the spare through a special port without removing the tire.



Under a hatch in the wheel compartment you will find an assortment of cadmium-plated tools and replacement bulbs. They rest in a fitted case of *sponge rubber*—further evidence of Rolls-Royce's obsession with peace and quiet.

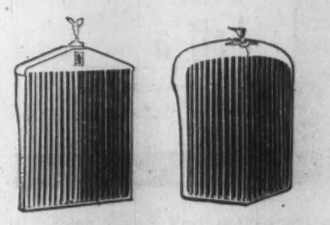
Corrosion is held at bay by a plating of chromium or cadmium on every nut, bolt, washer and cotter pin.

A dictating machine, an Espresso coffee maker, an electric razor, a bed, a telephone, and water for washing are available as optional extra conveniences.

The *basic* convenience of the Rolls-Royce is, or course, its magnificent riding qualities. Even at 100 m.p.h. (laws permitting) you have a feeling of sublime safety. Yet the 4700-pound car is delicately maneuverable.

The power-assisted steering is, according to Robert Glenton in the *Sunday Express*, "as delicate as the plop of a pearl into a glass of champagne. . . ." The power brakes will halt the car squarely from 100 m.p.h. without a tremor. And there are *three* independent brake linkages — two hydraulic and one mechanical. In the unlikely event that one linkage should fail, the others automatically keep the car under perfect control.

Here you see the only difference between the Rolls-Royce and the Bentley—their ra-



diator design. In all other respects they are identical motor cars. The Bentley costs $300 less because its radiator is simpler to make.

If you desire more information on Rolls-Royce and Bentley motor cars, please contact one of the distributors or dealers listed below.

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Japanese Ships Speed Service On the Seaway

MONTREAL (Staff) — Rising Seaway business will cause a pioneering Japanese shipping service to split its New York - Eastern Canada run into two.

Beginning in July, **Iino Lines** will run a separate service to Halifax, Quebec, Montreal, Toronto, Cleveland, Detroit and Sarnia.

Iino began the first scheduled sailing from Japan to Eastern Canadian ports about a year ago. It sent the first Japanese Seaway freighter into Toronto last fall.

Now the company says it will separate the Eastern Canadian from the New York run in order to cut sailing time between Japan and Canadian ports and to "accommodate growing tonnage".

Goods moving from Japan to Eastern Canada via Iino include cameras, textiles and toys, while synthetic rubber, hides, scrap and asbestos are among major products going in the other direction.

The new Canada-Great Lakes service will continue the previous monthly schedule and cut four days off the time from Yokohama to Montreal and Toronto.

Canada's Newsprint Output Still Riding the High Road

MONTREAL (Staff) — Canadian newsprint output continued to ride high in May but shipments surprised observers by drifting a little below figures for the previous year.

A closer look finds reassurance:

- **U. S. consumption** was 5.4% higher in May than in the same month of 1959. The U. S. market takes 80% or more of our annual newsprint output worth close to $750 million.
- **The 3.3% decline** in May shipments is believed due simply to labor troubles in Great Lakes ports and to variations in sailing schedules, rather than to any real decline in demand.
- **There is no change** in predictions that Canadian newsprint production this year should top the record of 6,468,815 tons in 1956.

U. S. consumption is the key.

And for the first five months it is running 5.4% ahead of 1959.

Government and industry predictions are that it will surpass 7.3 million tons for the full year, compared with the record 7,151,461 tons in 1959. Feeling in Canada is that the final total may well be 7.5 million tons.

Meanwhile Canadian mill operation continues at percentages higher than last year — 87.7% of capacity in May, 86.7% in May last year, 86.5% in the first five months, 81.8% in corresponding in 1959.

Here are comparative details:

	May 1960	May 1959	% Change	First Five Months 1960	1959	% Change
	Tons			Tons		
Output	563,072	551,317	+2.1	2,746,210	2,554,873	+7.5
Shipments to U. S.	438,572	456,225	—3.9	2,120,726	2,003,740	+5.8
Total Shipments	569,543	589,145	—3.3	2,664,929	2,502,037	+6.5
U. S. Cons'm.	685,066	649,914	+5.4	3,094,196	2,936,624	+5.4

Ask Wenner-Gren Railway Show Financial Ability

OTTAWA (Staff) — **Pacific Northern Railway** must present evidence of financial capability to the federal government before it is assigned land reserves for its proposed railway line in the Yukon (**FP**, April 2, 9).

PNR must also show that the line is economically justified, and will support itself, before it gets specific federal permission to build in the Yukon, where the federal government has jurisdiction.

On the other hand, the government will do nothing which would block **Wenner-Gren B.C. Development Co.** in its attempt to get the B. C. portion of the PNR started by June 30.

All these things have been made clear, unofficially, to the company which proposes to build the line from the B. C. government-owned **Pacific Great Eastern Railway** clear to Fairbanks, Alaska.

When Wenner-Gren unveiled the PNR plan two months ago, it specified a 1,050-mi. route which would bring the railway to the Alaska border of the Yukon Territory.

Not specified in April, but understood here to be a Wenner-Gren objective, is extension of the PNR an additional 250 mi. to Fairbanks, Alaska, presumably with the help of U. S. financing.

Under an agreement between Wenner-Gren and the B. C. government, the company must make a construction start on the B. C. portion of the railway by June 30.

When the plan was announced two months ago, Wenner-Gren B.C. Development Co. asked the federal government for permission to build along the specified Yukon route.

The cabinet considered the proposal, then asked the company for details of financing and of expected economic results of building the line. Neither was forthcoming, and the company got no written approval of the Yukon portion.

But, it is understood here, two things were conveyed, unofficially, to Wenner-Gren officials:

- **If the cabinet did receive an application** for a Yukon route, complete with details of financing and economic justification, specific approval, plus land reserves would almost certainly be forthcoming.

Approval would be a substantial certainty if Wenner-Gren had also made a good start in B. C., and at the same time had received approval of a Fairbanks link from the U. S. government, or appeared likely to receive it.

- **In the meantime, there was nothing**—from the federal viewpoint—to prevent Wenner-Gren from starting the B. C. portion of its railway whenever it wished.

Behind the federal compromise on the Wenner-Gren proposal are two pressures:

- **The cabinet doesn't want to offend** the Social Credit government of Premier W. A. C. Bennett, who intends to use the Wenner-Gren railway as a plank in his next provincial election — which may take place in September.
- **On the other hand,** federal approval of a Yukon route for the PNR implies federal responsibility for it.

Should railway building in the Yukon begin and bog down for any reason, the federal government would be expected to assist the communities which would spring up during the building, perhaps supply funds for construction.

In the meantime, Wenner-Gren B.C. Development Co. has applied to the B. C. Public Utilities Commission for a "certificate of public convenience and necessity" for the $140 million B. C. portion of the PNR. The application describes the B. C. portion, doesn't mention the Yukon section.

Hearings begin June 21, nine days before the deadline for a construction start.

PNR has been authorized to issue $1 million worth of $100 shares for interim financing.

One question which B. C.'s voters may answer:

What constitutes a construction start?

The B. C. route has been surveyed, and a location crew is in the field staking out the precise route.

If the Public Utilities Commission gives a quick go-ahead, the company could start immediately to clear the route and build a roadbed, thus beating its deadline.

Even current staking operations might conceivably be construed as a "construction start".

Men Wanted to Aid Study of Manpower, Employment

OTTAWA (Staff) — The study of manpower and employment in Canada, which the government has committed to a special senate committee, now waits on the efforts of Prof. John Deutsch to collect an adequate staff of experts.

The kind of people required may be scarce, expensive and busy.

But the proposal is to try to recruit economists and statisticians and labor experts who can assemble all the necessary facts and figures.

They would work in Ottawa as temporary staff of the Senate throughout the recess, drawing presumably on information from the Department of Labour and DBS.

They would also make their own studies to supplement available official figures.

Pay for this temporary staff of experts has not yet been considered.

The Senate committee, under the chairmanship of Three Rivers lawyer, Leon Methot, was expected to deal with finance when it received Deutsch's report on his recruiting efforts, (possibly this week).

When Deutsch, who is now a vice-principal of Queen's University, acted as one-man brains trust for last year's Senate committee on inflation, he was voted $100 a day. But in the present case, the proposed staff of experts would probably be required for a full 12 months.

Between now and the beginning of next year they would prepare basic facts for the committee's hearings, and their work would continue throughout the hearings and discussions next year culminating in the preparation of a final report.

The Senate's annual vote can hardly be stretched to cover this extra staff. The estimates allow only $734,000 for "general administration", $506,000 is for the pay of the regular staff, and nearly $200,000 for printing the Senate Hansard and other publications.

The special committee on manpower and employment will have to submit a staff budget to the full Senate.

If it is approved, Treasury Board may have to be asked to provide the funds out of some contingency fund until a supplementary estimate can be prepared and approved by both Houses of Parliament.

First Gas Turbine In Petro Plant

First gas turbine to be used in the Canadian petrochemical industry has been installed at the Edmonton polyethylene plant of **Canadian Industries Ltd.**

Capacity of this plant has been expanded to 40 million lb. a year.

One of the main features of the gas turbine is its ability to provide high temperature heat for processing.

The turbine was made by **Ruston & Hornsby** of England.

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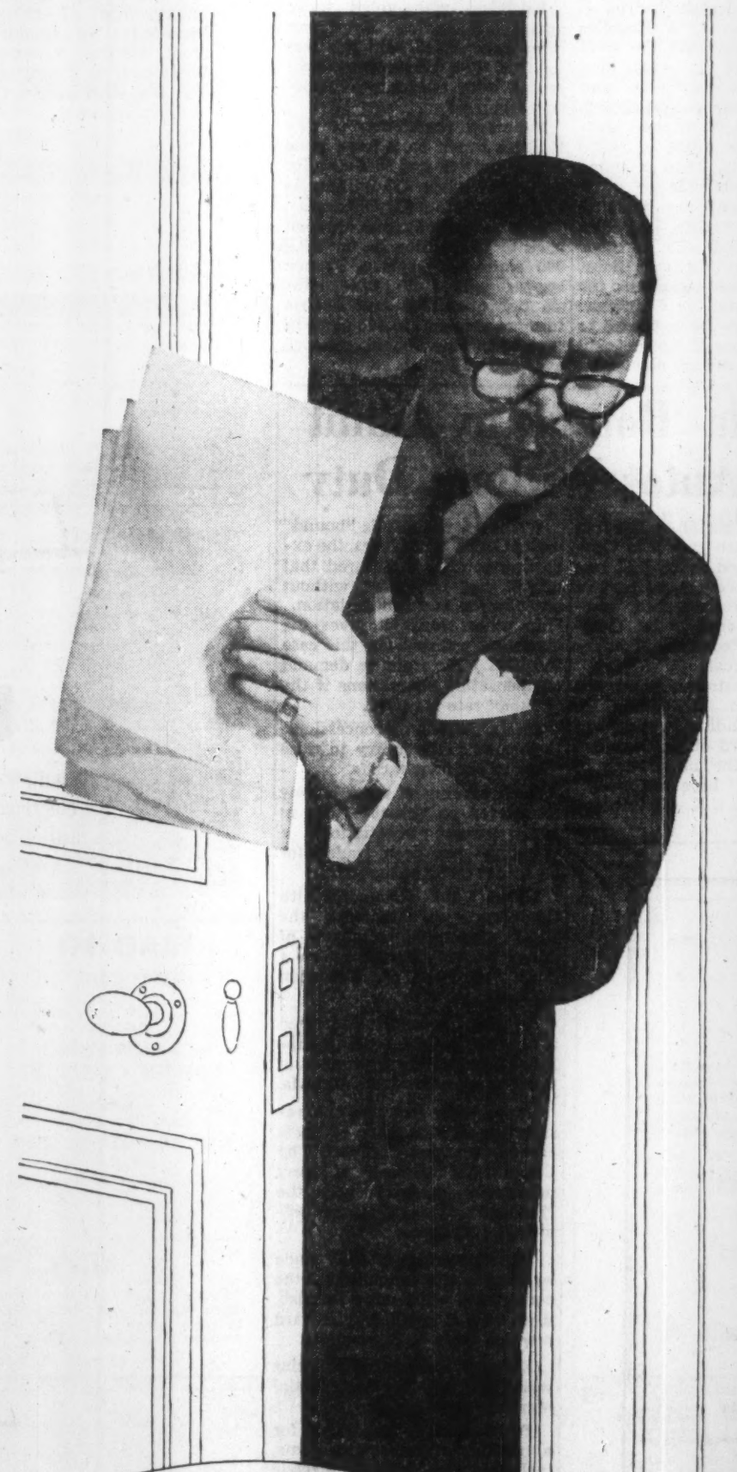

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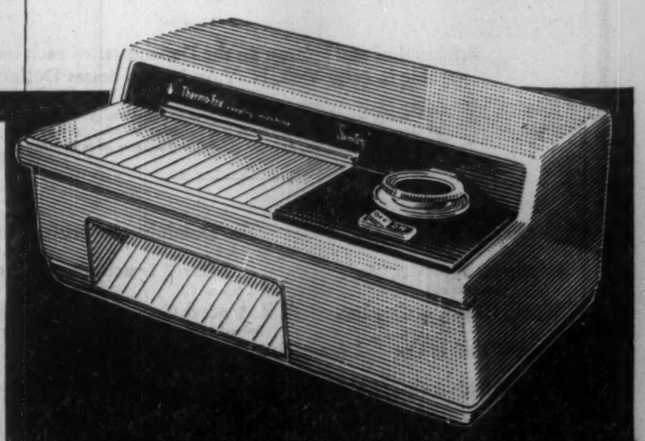

ANNOUNCEMENT

ROLLS-ROYCE APPOINTMENT

A. P. SMIBERT

It is announced by R. M. Kendall, Director and General Manager, Rolls-Royce of Canada Limited, that A. P. Smibert, C.A., Montreal, has been appointed Financial and Commercial Manager of the Company. He succeeds Ian Turner who has resigned to take up an appointment in another business.

Mr. Smibert was formerly Company Secretary and Manager of the Spare Parts Division and joined Rolls-Royce of Canada in 1952 as Senior Accountant. He graduated from McGill University in 1942 with a Bachelor of Commerce degree and he is a Chartered Accountant. He is Chairman of the Board of Governors of Lower Canada College. During World War II he served as pilot overseas with 407 Squadron of the Royal Canadian Air Force.

Cabinet Change Rapeseed Ruling?

The government could overturn the decision disqualifying rapeseed under the Crowsnest freight rates . . .

By LESLIE WILSON

OTTAWA (Staff) — The cabinet will face strong pressure to overturn a Board of Transport Commissioners' decision which has broad implications for farm income on the Prairies.

This week the commissioners dismissed an application by **Bogoch Seed Co.**, Edmonton, to have rapeseed declared a "grain" within the meaning of the Crowsnest Pass Agreement.

Significance:

- **Rapeseed doesn't qualify for the special low Crowsnest rates on grain**, which would add 7/10 of a cent a pound to the farm price, now about 3c.

The differential would transform rapeseed from a fairly profitable prairie crop into a very profitable one, and likely cause the switch of a million wheat acres into rapeseed within three years.

Rapeseed demand is growing in Europe and Japan where the oil is used to make margarine and the residue for livestock.

The cabinet will face pressure to overturn the decision both from within the government and without because:

- **The Agriculture Department** has been trying for several years to persuade Prairie wheat farmers to switch in to such other crops as rapeseed.
- **Fourteen conservative MP's** from Prairie ridings appeared on behalf of Bogoch at the rapeseed hearing. Two argued the case for the company, two testified for it, and 10 said they were ready to testify.

A cabinet rejection of the commissioners' decision could extend the Crowsnest grain rates to commodities not at present covered.

The commissioners split 3-2 on the Bogoch case.

Chief commissioner Rod Kerr and two colleagues held that, from a strictly legal viewpoint, rapeseed wasn't a grain because it wasn't specified in the Crowsnest Agreement of 1897, nor in contemporary freight tariffs.

Commissioner L. J. Knowles and a colleague said the railways had acted as though they thought the words "grain" and "flour" in the Crowsnest Agreement were to be applied generally, not specifically.

Since 1897, they had extended Crowsnest treatment to other kinds of "grain" not listed in contemporary tariffs, i.e., corn, buckwheat; and also to other kinds of "flour", i.e. corn flour.

If the cabinet overturns the Bogoch decision, the Crowsnest rates will likely be extended to additional kinds of "grain" and "flour." The railways now claim they lose money on Crowsnest freight.

This is the third time the commissioners have ruled on the rapeseed question (**FP**, Sept. 19, 1959).

Knowles, who voted twice against extending Crowsnest rates to rapeseed, said this was the first time the issue was presented with adequate evidence and argument.

Rapeseed production on the Prairies began on a large scale during the war and rose steadily until 1957 when 433 million lb. was produced on 617,000 acres.

Last year, production dropped back to 180 million lb. on 218,000 acres. This spring, French buyers agreed to take substantial quantities and Prairie farmers planted 568,000 acres in rapeseed. This should produce over 600 million lb.

Scotch Rumor Of Canadian Renault Plant

MONTREAL (Staff) — The president and general manager of France's **Regie Nationale des Usines Renault** last week threw cold water on rumors that his company planned to set up an assembly operation in Quebec.

The present rate of Renault sales in Canada — this year's target is 7,000 units—just didn't justify local assembly, Pierre Dreyfus told a press conference in Montreal.

Rumors said recently that a European car maker had plans to set up an assembly line in Canada, almost certainly near Montreal — and that the company was Renault.

"It is possible," Dreyfus said, "that one day the Canadian government might decide it wanted us to assemble in Canada. If that day comes we will certainly be ready to talk terms.

"If they are favorable enough we might do it. But for the time being it would not make sense economically."

Last year Renault sold nearly 6,500 cars in Canada — roughly double its total in 1958.

Sales in the first quarter of 1960 were 20% higher than the same period a year earlier and if the business climate remained favorable probably would exceed 7,000.

Canada 'Bound' to Admit U.K. Autos Without Duty

OTTAWA (Staff) — The free entry of British cars into Canada was assured to the U.K. less than two years ago, as part of a complicated contest in "one-upmanship" during the Commonwealth Economic Conference at Montreal.

The circumstances were undoubtedly in the mind of Reginald Maulding President of the U.K. Board of Trade, when he recalled the importance of this "binding" here last week.

More about U.K. car imports, pp. 25-26.

When a tariff rate is "bound" under GATT procedures, the exporting country is assured that it will not be raised without consultation and renegotiation.

In other words it gives the exporting country (in this case the U. K.) the right to demand compensating concessions if the "bound" rate is raised.

Or, in default of concessions, it permits that country to raise some of its own tariffs.

Such binding of rates is now considered so valuable that in many recent negotiations a "binding" has been traded for an actual tariff reduction.

During the Commonwealth Conference at Montreal, the U. K. announced removal of dollar import restrictions on a large number of Canadian products.

At the same time, it addressed a note to Canada (still unpublished) requesting a number of tariff concessions from Canada.

Its requests included the restoration of a number of preference margins reduced by Canada, the "binding" of many preference margins and the "binding" of many items admitted duty-free.

The concessions actually made by Canada and announced at the conference, with some flourish, went only a small way toward meeting these U. K. requests.

No new preferential margins were granted. No preferential margins were bound.

But free entry was bound for a number of important items, including cars, aircraft, electric generators, china, glass, biscuits.

The promise of continued free entry for these goods was the most important part of the little package of Canadian concessions.

The idea of cancelling it arouses indignation in U. K. circles.

It is less than two years old, they point out. It was a concession freely made by Canada to meet at least a small part of the U. K. requests, in return for sweeping liberalization on dollar goods.

If Canada withdrew it now, some observers assert, it would not only face a very tough renegotiation of tariffs with U. K. In addition Canada's good faith would be called in question.

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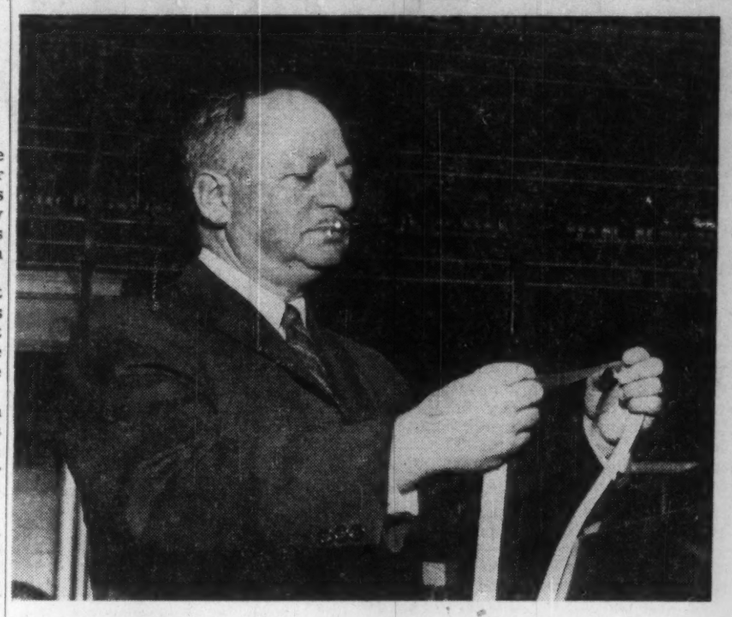


He scans the world of finance

JOE GOLDSMITH'S meticulous reporting in his daily financial column and in the concisely presented financial pages of The Montreal Star, have brought him compliments from small stockholders and large ones alike. But the highest praise was that paid to him a while back by a blind man, who wrote in to say that, for his own transactions, he had someone read him the Montreal Star's financial pages every afternoon.

"They are so complete," the man said, "that I get the whole picture and need no further reference."

As Financial Editor, Goldsmith has watched the development of Canada since he came to The Montreal Star in 1923, fresh from McGill University as a gold key prize winner with a degree in commerce. The tempo of the nation's financial interests was then vastly slower than it is now. Today, Goldsmith's job calls for a wide background of thoughtful, accurate, detailed knowledge of banking, international markets, steel, mining, manufacturing, etc. Since his appointment as Financial Editor in 1940, Goldsmith has travelled across Canada, toured its oil fields, explored its northern and western frontiers, descended into its mines and inspected new industries as they arose. This has given him a vast store of information about this country's economic climate, its trend and developments.

Over the years, Goldsmith has coolly watched various stocks rise to interesting heights. Although he will not advise people on what stocks to buy, he remembers once suggesting to a relative a well-known industrial stock then selling for $20.

"It should go to a hundred," Goldsmith told him. The relative didn't buy the stock.

What happened?

"It went to $150," said Joe with a shrug.

Did he buy any? "No," said Joe.

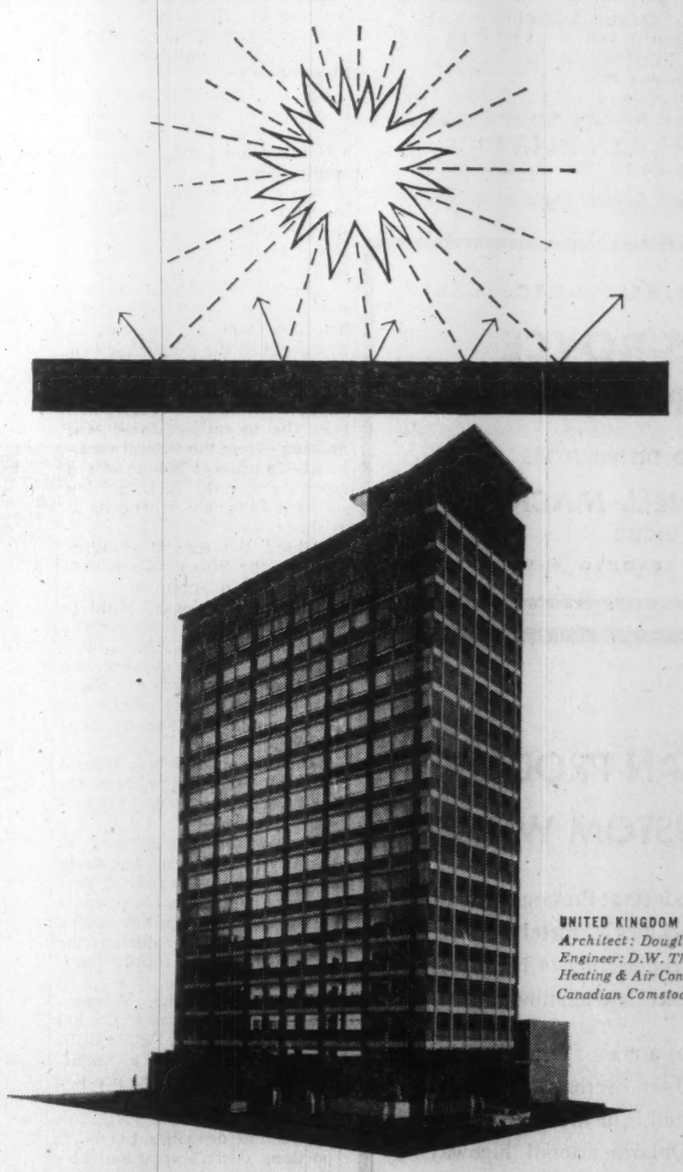
Goldsmith is often asked the obvious question: "With all this background — how is it that you haven't made a million dollars?"

Says Goldsmith: "I do not play the market—it's too risky!"

He is married, has one daughter, one son and two grandchildren.

Good reporting makes a good newspaper

The Montreal Star



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Wanted — Canadian firms wishing to sell in Europe. Advertiser conducts ON-THE-SPOT negotiations with potential outlets with sales supervision. Small Retainer. Particulars to

BOX 784, THE FINANCIAL POST, TORONTO.

ADDITIONAL LINE

Established Maritime Food Broker interested in adding an advertised line to fit in with Wholesale Grocery and Chain Store operations. Will arrange to meet interested party in very near future.

BOX 773, THE FINANCIAL POST, TORONTO

Manufacturers Agents

Required throughout Canada by modern paint manufacturer will prepay shipments, very profitable.

Box 754, The Financial Post, Toronto

OWN A SECOND BUSINESS . . OPERATE IN YOUR SPARE TIME

A Coin-Metered Westinghouse Laundromat® Equipped Laundry Store Can Net $4000-$8000 Annually.

Ideal for chain operation and/or absentee ownership. Many operate 24 hours a day, 7 days a week, because all equipment is coin-metered. We have helped plan over 8500 laundry stores. Only from a national organization of our size and experience can you receive the know-how essential to the security of your investment and a complete continuing program including assistance and guidance in installation, training and promotion. We finance up to 90% of the equipment . . offer you longest financing period at lowest monthly installments. No experience necessary. Call or write for full details. Compare our complete program.

ALD CANADA, LTD.
54 Advance Road, Toronto 18, Ontario
RO 6-7255

GRAVEL PIT FOR SALE

A large deposit of almost dust-proof pea gravel. Pit is fan shaped with every size of gravel from sand right up to 1¼" stone. Same material is mostly segregated by itself. Situated on the south side of the county highway ¼ mile east of Beachburg, Ontario. Price — 10c per yard. Would lend itself for any cement manufacturer or large capital gain. Terms. Telephone 15, Beachburg, Donald Conway.

COIN-OPERATED LAUNDRIES MAKE HANDSOME PROFITS

- You buy direct from manufacturer
- You save thousands of dollars
- No operating problems

Lowest possible investment. No labour problems. No inventory headaches. Excellent returns from your investment. Coin-operated laundries operate without attendants. We sell, service and finance complete installation. Direct factory service coast to coast. Our experience in the laundry industry is second to none! So, do it now! Call, write or wire . . .

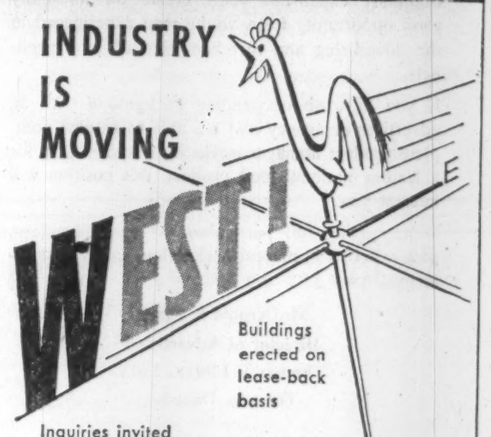
JOHN INGLIS CO. LIMITED
14 Strachan Avenue
Toronto 3 EM 6-7451

ALGONQUIN PARK

Swiss Chalet Style Summer Home for year round enjoyment. Six bed-rooms, guest Cabin all furnished, all conveniences. Safe sandy beach, boats, many extras. HI 4-2963.

COMMERCIAL and INDUSTRIAL REALTORS

INDUSTRY IS MOVING WEST!



Buildings erected on lease-back basis

Inquiries invited

ARONOVITCH & LEIPSIC LIMITED EST. 1905

FOUR SIXTY MAIN
Winnipeg, Manitoba
Canada

Realtors • Rentals • Insurance • Mortgage Loans

FOR SALE — IN EDMONTON SOUTH EAST CORNER 103 AVE. AND 105 ST.

LAND: 200 Foot frontage on 105 St and 150 Feet on 103 Ave. less trackage.
BUILDING: ONE STOREY BRICK, full basement, approx. 35,000 Sq. Ft. 2 freight elevators: trackage; loading docks.
PARKING: Extra lot 75 Ft. x 150 Ft., gravelled, rail fence — can be bought if purchaser requires extra property.
SUITABLE FOR — WHOLESALE, SEMI-RETAIL OR SALES AND SERVICE, due to proximity to First Class Retail Stores.

WRITE, WIRE OR PHONE ALEX HANSON

EXCLUSIVE Weber Bros. AGENCIES LIMITED AGENTS

REALTORS SINCE 1911
10013 - 101A Ave., Edmonton, Alberta • Phone GArden 4-7341

NEW INDUSTRIAL PARK

INDUSTRIAL — COMMERCIAL — WAREHOUSING
Situated in Town of Pointe aux Trembles, Montreal

- Total area 143 acres
- Park divided by new Metropolitan Expressway
- 3000 ft. frontage on Expressway
- Railway and harbour facilities adjacent
- Ample labour market and electric power

Ample raw materials produced in surrounding area. For further information and illustrated map, call or write:

Capital Realties Co.

2140 CRESCENT STREET • VI 9-9131 • MONTREAL 25, P.Q.

TRANSMETRO PROPERTIES LIMITED

offer industrial premises built to occupier's requirements in choice locations.
Leaseback financing at low rates.

25 KING ST. W., TORONTO
EM. 4-1293 HU. 5-0433

FAST CAR WASH

Located in the heart of an industrial city within commuting distance of Toronto. $60,000 gross annual income shows a comfortable return on investment. Land development potential excellent. Asking price $175,000, terms to be arranged. Call for details, Norm Black, BA. 2-1186,

NORM BLACK REALTY LTD.
4905 YONGE ST., TORONTO

EASY WAY TO TOP PROFITS! AN EASY SELF SERVE LAUNDRY STORE

Hundreds of satisfied owners of Easy Self Serve Laundry Stores have already proved it, because their stores have all these exclusive advantages.

1. Famous Easy Spiralator Automatic Washers wash clothes cleaner . . . keep customers coming back.
2. Heavy Duty Canadian-made equipment and Factory Service Contract cut maintenance costs, assure continuous operation, protect profits.
3. They have the right location because we know where stores will pay off best.
4. They have the benefit of GSW's vast experience in locating and installing stores all over Canada.

In addition GSW supplies *all* the equipment, handles installation, provides generous financing and assists in promotion. Find out how easy it is to get started in a highly profitable Coin Laundry Store of your own. Deal direct with the manufacturer.

Easy Self Serve Laundry Division of

GENERAL STEEL WARES LTD.
76 Miranda Ave. • RU. 7-2471 • Toronto 10

PUT YOUR MONEY TO WORK

12% FIXED YIELD
Finance Company

Will borrow money on short term notes. Prime security.

Call EM. 4-8281

INTERESTED IN SELLING OR MERGING WITH LISTED COMPANY

Manufacturer of equipment sold primarily to top-rated basic food processing industry. Company has been in operation over 40 years, is well-recognized in the trade, annual sales volume over $1,000,000 to $1,500,000. Company assets consist of over 90% current and liquid assets—balance fixed assets. Sound reasons for making this transaction. All inquiries will be replied to immediately, and will be kept strictly confidential. This advertisement is placed by the principals of the Company. Reply

BOX 794, THE FINANCIAL POST, TORONTO

CITY OF ST. JEROME, QUE. TO LET INDUSTRIAL BUILDING

Approximately 40,000 square feet on 4 stories. Brick construction. Sprinkler equipped. Elevator. Electric power, 110-220-550.

Can be subdivided to suit tenant. Apply to:
J. O'DONNELL,
INDUSTRIAL COMMISSIONER,
CITY HALL
St. Jerome, Que.

NOTON

INDUSTRIAL DEVELOPMENT

SERVICING INDUSTRY through "A Complete Land and Building Service"

INCLUDE NOTON IN YOUR PLANS

C. H. NOTON & CO. LTD.
108 - 12TH AVENUE SOUTHWEST
CALGARY, ALBERTA PHONE AM 3-6290

FOR SALE OR MERGER — IN MONTREAL

Small manufacturing company now successfully engaged in the electronics field.

This company which has a six figure tax loss but a line with a large potential serves a major industry and will interest an established company wishing to diversify or investor(s) wanting to launch a business from an established base. Primary reason for sale or merger: Owners want to retire.

Write Box 786, The Financial Post, Toronto

BUILDINGS FOR SALE — LONG TERM LEASES

New industrial buildings rented to reliable tenants on 20 or 30 year net leases. Require cash $75,000 to $600,000; balance on long term self-liquidating mortgages. Yield 9% to 10% on cash invested.

Apply direct to owner-builder indicating approximate size of investment you prefer

INDUSTRIAL LEASEHOLDS LIMITED
12 Sheppard Street, Toronto 1, Ont.

INDUSTRIAL LAND AND BUILDINGS IN AJAX

Available NOW, 5 ACS, 2 BLDGS, 15000 Sq. Ft.

Modern, one story, steel/concrete Factory 10,800 sq. ft., 14' clear under trusses. Frame office/warehouse 4,340 sq. ft. Suitable for Light or Medium Heavy industry of a type having an expansion potential.

WATER SEWER POWER RAIL-SIDING

Deal through own broker or Direct by contacting Mr. Fearman at

FISHER & LUDLOW (CANADA) LTD.
Box 130, Postal Station "C", Hamilton, Ontario, LI 4-2234

LINES WANTED

Prairie organization, contacting Architects and Consulting Engineers to the construction industry, interested in supply and installation of unit mechanical products.

Box 739, The Financial Post, Toronto

EXPORT OPPORTUNITY

Canadian with 15 years sales and administrative experience taking up permanent residence in United Kingdom. Interested in representing Canadian exporters in U. K. and North West European markets. First-class references.

BOX 810, THE FINANCIAL POST, TORONTO

MANUFACTURERS AGENT—ONTARIO

Looking for lines. Well established with jobbers, chains, department stores, mail order, etc.

Apply BOX 809, THE FINANCIAL POST, TORONTO

REAL ESTATE

A Dominion-wide market place for buyers and sellers of land, residences and commercial buildings

DISPLAY ADVERTISING RATES

$9.80 per column inch (one column wide x one inch deep) or 70 cents per agate line (14 agate lines = one column inch)

Copy must be in Toronto Office Monday a.m.

Display advertising in this section is payable in advance.

IN GALT

OFFICE SPACE

Prime location, new Simpsons-Sears Building. Fully air conditioned—ultra modern.

LEATHER BELTING — SPECIALTIES & MACHINERY

Established 35 years. Will sacrifice building and business.

Write — Wire — Phone

REG. AVEDESIAN LTD.
REALTOR
GALT 5220 13 WATER ST. N.

WINNIPEG HOUSE TO RENT

2 strys, furnished. Sept. 1-June 30. Crescentwood Dist. L.R., open F.P., D.R., den, powder rm, new kit, 4 bdrms, 2 bathrms. Modern features & appliances. Garage. H.W. central ht. Rent $200 mo plus ht. BRUCE H. ROBERTS & CO., Realtors, 305 Power Bldg, Wpg 1, Man.

FOR SALE

"Stonecroft"

The Attractive Suburban Estate of the late Mrs. M. Eileen McEachren and The Internationally Famous

"Tailteann Kerry Blue Kennels"

23.8 acres of high ground on Steeles Avenue East, including about 5 acres of landscaped grounds surrounding buildings. The main residence has spacious living room opening to patio, dining room, well equipped modern kitchen; master bedroom suite on ground floor, including dressing room and bathroom; 3 bedrooms and bathroom on upper floor. Large heated garage for 2 cars. Swimming pool. Staff bungalow with 4 rooms and bathroom.

The Ultra-modern kennels have radiant heating, apartment for attendants, large trophy and grooming rooms, tiled kitchen, whelping and stall rooms; fenced runs with roof and pavement.

Enquire of

National Trust Company Limited

Real Estate Department

20 King St. E. Toronto, Ont. EM. 4-9141

OWN YOUR OWN BUSINESS!!

INCOMES UP TO $1,000.00 PER MONTH
KING KOIN PHILCO-BENDIX EQUIPPED

Launderettes are the most profitable in this — Canada's fastest growing business.

Available only through KING KOIN:

- Three types of HEAVY DUTY COMMERCIAL PHILCO-BENDIX WASHERS. (DOUBLE & Single Load Tumble Action & Largest Capacity AGITATOR Washers.)
- Newest and Largest Capacity PHILCO-BENDIX Dryer.
- Low Down Payments and Quantity Discounts.
- Most Complete Merchandising and Engineering Program.

If it's Commercial—
It's PHILCO-BENDIX

WRITE, WIRE or PHONE for COMPLETE INFORMATION

KOIN LAUNDRY SALES, LTD.,
20 College Street
Toronto 2, Ontario, Canada
WA 5-4515

ADDITIONAL LINES

Manufacturer's Rep. wants additional lines for Winnipeg, Man.

Box 793, The Financial Post, Toronto

SILVER DISTRICT

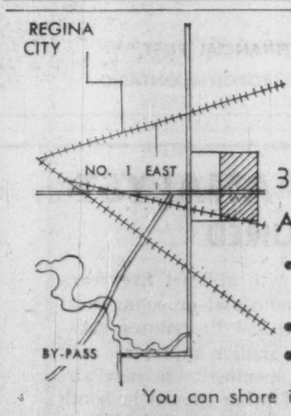
Without burdensome amount of base metals. Arizona. No maps or reports mailed. Will show district and data. Write

Earl Webster, c/o C. O. Carlson
Payson, Arizona

TORONTO LAND

Danforth at Warden. 1 acre with 100-foot frontage. Future subway terminal. There is a modern factory building 50 x 100, one story brick, mill construction with offices presently located on this property. The owner will remove the building if purchaser desires.

Box 805, The Financial Post, Toronto



300 CHOICE ACRES AVAILABLE

- ½ mile frontage on either side of Trans-Canada Highway with trackage.
- 10 minutes to city centre.
- Located on eastern city limits.

You can share in Regina's Future growth.

This land is now available for RESIDENTIAL or INDUSTRIAL investment.

CONTACT

MAYFAIR DEVELOPMENT CO. LTD.
806 McCALLUM HILL BLDG., REGINA

AVAILABLE

Sales and warehousing organization with salaried salesmen in strategic locations across Canada calling on Mining, Oil, Municipal, Pulp and Paper, Industrial, etc. accounts, with technical mechanical product is desirous of diversification. Established over 30 years. Well financed and further financing available if required for license exclusive representation or outright purchase of reasonably allied products. All replies strictly confidential.

Box 778, The Financial Post, Toronto

WAREHOUSE TO LEASE GRIMSBY

15,000 sq. ft. sprinklered, heated warehouse to lease from March 1st, 1961. Wide bays, 22 ft. clear height interior, one floor. Railway spur loading platforms, truck access. Good rent to top credit tenant.

HAROLD JARVIS REAL ESTATE LTD.
Box 656, Grimsby. WH. 5-2208

DISPLAY ADVERTISING RATES

$9.80 per col. inch per insertion (70 cents per agate line, 14 lines constitute one inch) Closing date — Copy must be in Toronto Office by Monday a.m. Display advertising in this section payable in advance.

OFFICE SPACE AVAILABLE

Ultra modern Office Building to be erected on main street of Sudbury. Air conditioning — parking — elevator service

Box 747, The Financial Post, Toronto

TORONTO SUBURB

View unequalled. Lake Ontario. Eastern suburb of Toronto. We are dividing our estate. 1 or 2 acres for sale, beautiful view. Convenient to protestant and catholic schools and churches.

Box 806, The Financial Post, Toronto

OKANAGAN LAKE 1½ MILES BEACH

B.C.'s most famous and largest Fruit Growing Ranch is now offered for sale for the first time. Owned by same family for over 40 years. Situated on 1½ miles of beautiful Okanagan Lake beach in Canada's top tourist climate midway between Kelowna and Penticton, British Columbia. The Ranch contains approximately 335 acres with 95 planted to fruit trees. Buildings consist of own fruit packing, cold storage and shipping plant, 3 modern homes, employees quarters, full line of equipment. Consistent record of earnings with increasing potential. This property would also make a highly profitable beach lot subdivision. (Okanagan Lake beach frontage sells at $40 to $100 per foot.) Price—$200,000. Terms available. (Courtesy to License Brokers.)

A. F. CUMMING LTD.
REAL ESTATE, 210 MAIN STREET, PENTICTON, B.C.

THE FINEST OFFICE SPACE IN TORONTO AVAILABLE FOR LEASE IN THE NEW

PRUDENTIAL BUILDING

(N/W Corner King and Yonge Sts.)

POSSESSION DECEMBER 1960

Inquiries Invited —

CHAMBERS AND MEREDITH
Limited *Realtor*
EM. 6-3921

or

WOOD, FLEMING & CO.
Limited *Realtor*
EM. 4-6161

ANNOUNCING

Important appointments in Canadian Industry, Finance, Business and Government

Breithaupt, Milsom Ltd. (Toronto) —Donald Byers, appointed to creative department.

Callow Bros. Ltd. (Toronto)—H. B. Stevenson, president; A. S. Loffree., vice-president.

Canada Life Assurance Co. (Toronto) — James Hamilton, assistant superintendent, group sales.

Canadian Blower & Forge Co. Ltd. (Kitchener, Ont.) — Mortimer A. Montgomery, vice-president, sales.

Canadian Chemical Co. (Montreal) —John C. Clunie, manager, product development department.

Canadian Clark Ltd. (St. Thomas, Ont.)—George Spatta, chairman; Clarence E. Killebrew, president.

Canadian Fishing Co. Ltd. (Vancouver) — Sidney J. Collins, secretary.

Dearborn Chemical Co. (Toronto) — S. C. Currie, western manager.

A. B. Dick Co. of Canada (Toronto) —Wilfrid W. Parry, director.

FWD Corp. (Canada) Ltd. (Kitchener, Ont.) — J. Kenneth Sims, chairman; Roy E. Brown, president; Douglas W. Brown, director; R. J. Hiller, secretary-treasurer.

Ford Motor Co. of Canada Ltd. (Toronto)—Roy T. Lawrie, controller, Windsor manufacturing operations.

Fram Canada Ltd. (Stratford, Ont.) —Paul F. Hartz, president; Lyle G. Bahnmiller, vice-president; Victor F. Baumonk, vice-president, production; William W. Nesbitt, general sales manager.

Fruehauf Trailer Co. of Canada (Dixie, Ont.)—N. Hartsburg, Edmonton branch manager; M. McPhail, sales representative, Edmonton.

Great-West Life Assurance Co. (Winnipeg)—Donald M. Elliman, director.

H. M. Long Ltd. (Montreal) — J. D. McKeown, chairman; A. E. Barber, president; S. Boyd Whittall, vice-president.

McConnell, Eastman & Co. Ltd. (London, Ont.) — H. W. Pope, secretary-treasurer.

National Life Assurance Co. of Canada (Toronto) — Leslie R. Muir, special representative, Toronto.

National Steel Car Corp. (Hamilton) —R. W. Cooke, comptroller.

Northern Pigment Co. (Toronto) — —W. H. Nord, plant manager.

Ontario Paper Co. (Thorold) and Quebec North Shore Paper Co. (Montreal) — Gordon Godwin, vice-president, woodlands.

Ortho Pharmaceutical (Canada) Ltd. (Don Mills, Ont.) — Wilfred H. Norman, director.

Perini Limited (Toronto) — James Hermiston, safety director.

Philips Light and Appliance Div., Philips Electronics Industries — W. A. Grant, merchandising manager, Small Appliance and ELA department products; D. P. Gauthier, sales manager, Eastern Canada covering Quebec, the Maritimes and Ottawa Valley; G. McPherson. sales manager of all activity west of the Lakehead.

Radio Condenser Co. (Toronto) — C. D. Murdock, vice-president.

Reader's Digest Association (Canada) Ltd. (Montreal) — E. Paul Zimmerman, president and chief executive officer.

Recording Statistical Corp. (New York)—J. Spencer, vice-president in charge of Canadian statistical operations; B. A. Lawless, manager, Toronto statistical division.

H. H. Robertson Co. (Pittsburgh, Pa.) — D. A. Jones, vice-president and general manager, building products; A. J. Turney, vice-president and general manager, **H. H. Robertson Co. (Hamilton).**

Rolls-Royce of Canada Ltd. (Montreal) — A. P. Smibert, financial and commercial manager.

Traders Finance Corp. (Toronto) — S. G. Lee, assistant vice-president, industry relations; E. W. Fingarson, regional manager, central Ontario; F. J. Donahoe, regional manager, Atlantic provinces.

United Steel Corp. (Toronto) — A. Joedicke and R. O. Pennington, directors.

Josiah Wedgwood & Sons (Canada) Ltd. (Toronto)—Michael D. Eccles, sales manager.

Sixth Line Buys Navigation Gear

MONTREAL (Staff) — Another world airline has ordered Canadian designed and built Doppler navigation equipment for its jet fleet.

The buyer: **South African Airways.**

The makers: **Canadian Marconi Co.**

South African Airways has ordered six of the sensor-computer units which sell for around $26,000 each. They will be used in its **Boeing 707s.**

So far six major lines have ordered the equipment and indications are that several others may place orders in the near future.

Rails Ask Fare Boost

MONTREAL (Staff) — Canadian railways have applied to the Board of Transport Commissioners for new passenger fare increases.

The suggested increases are small, but significant.

The lines want to:

- **Change the basic rate** per passenger mile from 4.4c to 5c.
- **Increase minimum fares** from 25c one way to 30c, and 50c round trip to 60c.

Donald Mowatt, secretary of the Canadian Passenger Association said the proposal will not affect either commuter rates or fares between Eastern Canada and the Pacific Coast, or all-inclusive fares.

CAREERS

This is Canada's national meeting place for executives who have positions to offer, and for those who have ability to offer

EMPLOYMENT WANTED

CREDIT SUPERVISOR

Experienced credit supervisor desires responsible position providing challenging opportunity with expanding co. Fully experienced in branch office management and supervision of outstandings totaling more than 7½ million. Also fully experienced in staffing and training of branch office personnel.

Box 815, The Financial Post, Toronto

SENIOR SALESMAN

Industrial, desires position as factory rep. West Canada pref. Experienced. Travel no objection. Good habits. Highest references on request.

Box 814, The Financial Post, Toronto

ENGINEERING MANAGER

Professional Engineer, age 37, broad experience in Mechanical, Light Structural & Sheet Metal Design and Development for mass, batch and job shop production; 14 years as Engineering Manager and Supervisor. Seeks challenging responsible post demanding Administrative or Project Management ability. Thorough appreciation of Engineering and related Manufacturing economics, personnel problems, planning, estimating, etc.

BOX 782,
THE FINANCIAL POST, TORONTO

Salesman

for British Columbia, 14 years experience, age 34, contacts industrial, wholesale hardware, plumbing and electrical.

Box 800, The Financial Post, Toronto

SENIOR ELECTRICAL ENGINEER

12 years industrial experience in all aspects of high and low voltage power distribution and utilization. Specialist in switchgear, network protectors, carrier frequency control and other product design and application. Has executive experience. Cost conscious. Seeks responsible position where versatility and ability to work alone are essential. Interested in product, utility or plant engineering.

BOX 813, THE FINANCIAL POST, TORONTO

EXECUTIVE

Chartered accountant, age 45, substantial administrative experience, desires position involving financial management of small or medium size corporation where broad professional and financial background may be fully utilized.

Salary important but will modify for exceptional opportunity. Toronto or Montreal preferred.

BOX 811, THE FINANCIAL POST, TORONTO

DO YOU NEED A MAN TO CARRY THE BALL?

An Ontario Chartered Accountant, 40 years old, with MORE than financial experience, desires a change of position. His varied and extensive experience well qualifies him for a senior general management position.

Write to **Box 802, The Financial Post, Toronto,** for a complete resume. All replies will be held in strict confidence.

PLANT ENGINEER AVAILABLE (MECHANICAL)

9 years—Chief Plant Engineer of a minor automobile manufacturer.
15 years—various plant and maintenance engineering positions with one of the major automobile manufacturers.

Thoroughly familiar with all aspects of automobile manufacturing from foundry to final assembly. Experience has been very wide.

Desirous of position where experience can be put to full use.

BOX 779, THE FINANCIAL POST, TORONTO

All inquiries will be acknowledged.

NEWSPAPER ADVERTISING MANAGER
AVAILABLE

Do you want balanced gains in national, local and classified advertising? Do you want a better-trained retail ad staff with emphasis on good copy and client service? This experienced newspaper advertising man has fourteen years' successful record of gains in all departments of large Canadian daily and now wishes to relocate permanently on smaller daily offering real challenge. Excellent references. Smooth worker in a team. University education with early Toronto department store advertising and agency background. Capable of creative, promotional, retail and general copy and artistic layouts that SELL! Strong on Specials for Plus Linage; thorough knowledge of modern newspaper rate structures, practices, ROP Color and Bureau of Advertising techniques. Has two young children and is in excellent health. Opportunity to serve more important than high income. Available July 1st.

BOX 791, THE FINANCIAL POST, TORONTO

POSITION WANTED IN ENGLAND/ CONTINENTAL EUROPE

—Offering Advancement to General Management and Business Development Opportunities in European Operation

Qualifications include C.A. degree. Present position: Director of Financial House with diversified interests incorporates management and policy-making functions as well as financial control. Age 29.

Salary important but especially interested in opportunity offered. Please contact

BOX 789, THE FINANCIAL POST, TORONTO

PRODUCT MANAGER
THOMAS J. LIPTON, LIMITED

Company expansion plans create an unusually good opportunity for a young man experienced in the advertising and merchandising of food products.

If you have an outstanding background with an advertiser or agency and are able to assume complete product manager marketing responsibility for a leading national food product, this position will interest you.

Write, giving full particulars — age, education, past experience, present occupation, salary requirements, to:—

Mr. Arnold S. Clark
Director of Advertising
Thomas J. Lipton, Ltd.,
Toronto, Ontario.

TREASURER

Our client, a well-known Company in the food industry with Head Office in Montreal and operations throughout Canada, requires a Treasurer.

This is a senior management position involving responsibility for all accounting activities and the development and implementation of profit plans including capital and expense budgets and the systems and procedures required to attain corporate profit objectives. In addition, this position includes responsibility for the design of suitable control reports to measure performance of divisional activities.

The successful candidate will probably be performing similar work at present in the food or a related industry. He will probably be earning a five-figure salary and be between 35 and 45 years of age.

Please reply in confidence, giving full particulars to

URWICK, CURRIE
LIMITED
Management Consultants
100 University Avenue, Toronto 1, Ontario

NATIONAL ORGANIZATION

REQUIRES the services of a personable man with a broad practical experience in the warm air heating and air conditioning industry with a thorough knowledge of the design manuals published by the National Warm Air Heating and Air Conditioning Association and with an interest in class instruction work. Some travelling required.

APPLY in writing, stating qualifications and salary expected to

BOX 783, THE FINANCIAL POST, TORONTO

EXECUTIVE SALESMEN
INVESTMENT FUND

Opportunity for mature personable salesmen with or without financial experience to earn a substantial income. Openings exist in Toronto, Montreal and Quebec. Please submit resume, including telephone number. All applications will be acknowledged.

Box 799, The Financial Post, Toronto

SOCIAL RESEARCH

The Canadian Broadcasting Corporation invites applications for two research posts in its Audience Research Division. Applicants should have a university degree in one of the social sciences, and a sound understanding of sampling procedures and research design. They must be able to provide evidence of having successfully completed one or more research projects involving field interviewing and data analysis.

In the case of one of these vacancies, preference will be given to a candidate with practical experience in the statistical analysis of social research data and in problems of sampling.

These are both senior posts carrying considerable responsibility and the Corporation is prepared to offer attractive starting salaries to suitable candidates.

Apply, giving full particulars, to Assistant Director of Audience Research, Canadian Broadcasting Corporation, P.O. Box 806, Ottawa, Ontario.

LIFE INSURANCE

THE NORTHERN ASSURANCE GROUP
now wishes to appoint one or two additional
LIFE INSPECTORS

to participate in the development of the life business of the group throughout Canada.

These are salaried official appointments with responsibility for providing, for the general agents of the group and of its associates, basic training and specialist knowledge in writing life insurance. A considerable amount of travelling may be necessary and a company car is therefore provided. Initial remuneration will depend on experience and qualifications, and there are exceptionally generous employee benefits.

Applicants should be willing to relocate with generous company assistance in any major city if this is required. The essential qualifications are:

Age 30-45
Good personality with keen sense of humour
First class experience and knowledge of writing life insurance

Although a thorough knowledge of individual and group business will be required, including tax implications, additional training will be given where necessary to any applicant considered suitable.

All replies will be treated in strictest confidence and no enquiry of any sort will be made prior to interview, which will where possible be arranged locally. Applications, giving complete details of experience, qualifications, outside interests and activities, etc., should be marked "Staff Confidential" and addressed to:

Actuary, The Northern Assurance Group
88 University Avenue, Toronto 1

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Don't let business surprises catch you off balance. Get The Financial Post for timely, week-by-week coverage of business across the land.

In Canada: $8 a year; 2 years $14
Elsewhere: $9 a year; 2 years $16

RS RÉSUMÉ SERVICE CO.

Your job application will be more effective with our professionally prepared résumé. For details call HU. 1-6362 or inquire at

Rm. 304, 87 Eglinton Avenue E., Toronto.

SALESMEN

National Investment Dealer specializing in Mutual Funds is now expanding this department.

An exceptionally good opportunity exists for 2 or 3 salesmen with proven sales experience; not necessarily in securities, since we provide training.

Our Investment Department provides a full range of Mutual Funds—Savings Plans — Personal and Group Pension Plans.

This is an opportunity for experienced and successful salesmen to earn above average commissions as well as early promotion in an expanding division of the company.

Rates of commission to be negotiated. Full range of insurance and pension benefits.

Reply to Box 801, The Financial Post, Toronto, giving full particulars.

DIRECTOR OF SALES
Executive Compensation to be Discussed

The Job . . .

A challenging opportunity to assume full responsibility for the sales of a medium sized Canadian company. Basic responsibility will be the development and vigorous direction of a dynamic marketing program and supervision of sales. Company and individual growth prospects are very good.

The Man . . .

He is 35 to 45 years old, preferably with a University Degree. He has demonstrated competence in modern marketing techniques, and a personal record of integrity and growth. Mature, he is analytical, energetic and imaginative, and desires further scope for his ability.

Please reply in complete confidence to:

PAYNE-ROSS
LIMITED
management consultants
350 SHERBROOKE ST. W., MONTREAL

OPERATIONS AND METHODS OFFICER
required by
DEPARTMENT OF AGRICULTURE
OTTAWA
$6,300 – $7,020

To supervise and conduct surveys on methods and procedures used in the business administration of the Department.

Qualifications include university graduation, a number of years' experience in conducting studies of surveys and a good knowledge of administrative principles and techniques.

Details and application forms available at main Post Offices, National Employment Offices and Civil Service Commission Offices. Quote Competition Number 60-555.

ACCOUNTING EXECUTIVE
Oil Refining Company

A Canadian petroleum refining company has a senior opening in Financial organization.

Must have ability to organize and supervise accounting, financial and analytical functions. Should have college degree, or equivalent in accounting, financial management or related field.

Refinery experience desirable but not absolutely necessary. This position is for the man with analytical ability, sound judgment and skill in working with people.

Preferable age range 30 - 45. Salary $7,500 - $10,000, depending upon qualifications and experience. Exceptionally good opportunity for advancement.

Replies will be kept confidential.

Please send resume of experience and education to

Box 748, The Financial Post, Toronto

CHIEF CHEMIST

A Canadian oil company requires a chief chemist to head up a 25 man, modern, completely equipped laboratory. This is an excellent career opportunity for an experienced laboratory supervisor who wants the challenge of developing a relatively new organization into an effective and smooth-working team.

A thorough knowledge of oil refinery laboratory work and a degree in chemistry or physics are prerequisites.

Salary will be commensurate with capabilities and experience.

All replies will be kept confidential. Please mail résumé of experience and education to

BOX 769, THE FINANCIAL POST,
UNIVERSITY AVENUE, TORONTO, ONTARIO

SYSTEMS ANALYST
REQUIRED

University graduate with at least five years experience in large industrial or commercial organization. Systems and Procedures background preferred but similar experience will be considered. This opening is in new air-conditioned plant just being opened in South Western Ontario. The Company has been established in Communications field over seventy-five years. Outstanding Company benefits including pension plan. Salary commensurate with experience. Please apply to

BOX 785, THE FINANCIAL POST, TORONTO

SALES AND MARKETING MANAGER
SALARY ABOUT $15,000

One of our clients, an internationally known manufacturer of consumer products, requires a General Sales and Marketing Manager, 37-47.

The successful candidate must be a university graduate with extensive experience in the major aspects of sales management and marketing management of quality consumer goods on a national scale.

The company offers the usual benefits and an outstanding opportunity for advancement.

Please reply in writing or phone EMpire 6-1068. All replies treated in strict confidence.

330 BAY STREET
TORONTO

EXECUTIVE SELECTION CONSULTANTS

TREASURY COST AUDITOR
required by
Comptroller of the Treasury
Ottawa
$5,580-$6,780

Professionally qualified accountant to audit the cost of production contracts, prepare related working papers and provide senior assistance in complex audits.

This competition is open to qualified residents of the Province of Ontario.

Details and application forms available at main Post Offices, Offices of the National Employment Service and Civil Service Commission Offices.

Quote Competition Number 60-615.

ASSISTANT
MECHANICAL SUPERINTENDENT

required for large open pit mine in Northern B. C.

Qualifications: Must have a minimum of five years mechanical background in supervising crews handling heavy equipment and maintenance in addition to being able to do required paper work.

Education: B.Sc. in mechanics preferred.

Excellent starting salary and fringe benefits.

Housing available at nominal charge.

Please state in first letter age, education, marital status and references to Mr. W. James, Personnel Manager, Chamber of Mines, 10060 - 100 Street, Edmonton, Alberta.

LS

CONSULTING OPPORTUNITY

For a Senior Industrial Engineer with diversified experience in improving manufacturing methods.

Candidates should preferably hold an engineering degree, be thoroughly familiar with the techniques of work measurement, and have a good general background in developing cost control and production planning procedures. This position offers excellent potential for individual growth.

AGE: 30 - 45 SALARY: To be discussed

Applications, which will be held in confidence, should give full details including present salary.

Leetham, Simpson Limited
Management Consultants
EXECUTIVE PLACEMENT DIVISION
2100 Drummond St., Montreal VI 9-6338

University of Alberta Faculty of Commerce

Senior appointment in teaching and research in Production. Areas to include plant location and layout, processing analysis, linear programming, quality control and related subjects.

Preference for post graduate training with not less than three years' industrial experience.

Appointment September 1st, 1960.

Salary: $9,000 to $10,000.

Apply to **Dr. Hu. Harries, Dean, Faculty of Commerce, University of Alberta, Edmonton.**

SALES MANAGEMENT OPPORTUNITY

Aggressive, hard-hitting man of senior calibre is required by one of our clients to manage the sale through franchised dealers of an outstanding product in the specialty home service field. The product is technically and functionally superior to competitive lines and has the Good Housekeeping Seal of Approval.

The present group of franchised dealers must be greatly expanded on a Canada-wide basis. Advanced dealer programme and aids are already established.

The successful applicant will be under 40, with at least 5 years' experience managing franchised dealers in the specialty home products field. He will be Toronto based, but will have to travel extensively.

Applicants now earning less than $9,000 will be given secondary consideration. Initial salary will be in line with experience.

Replies, which will be treated in strictest confidence, should state age, education, detailed experience and present salary, and be addressed to:

WOODS, GORDON & CO.
15 Wellington Street West, Toronto 1, Ontario
MANAGEMENT CONSULTANTS

CAREERS

This is Canada's national meeting place for executives who have positions to offer, and for those who have ability to offer

HELP WANTED

SALES ENGINEER

Excellent opportunity with large manufacturer of concrete products. Good salary and extensive fringes. Graduate, familiar with structural design and masonry detail preferred.
Reply giving resume of education, age, marital status and employment history to:

BOX 808, THE FINANCIAL POST, TORONTO

SPECIALIST IN LABOUR RELATIONS

General Manager required for Management Consulting Firm specializing in labour relations.

Salary is open and dependent on experience and qualifications.

The successful applicant must have a thorough knowledge of all aspects of union negotiations, arbitration and general administration of collective agreements.

All replies will be treated in strict confidence.

BOX 804, THE FINANCIAL POST, TORONTO

DIRECTOR OF SALES FOR ONTARIO

Minimum Starting Salary — $10,000

The Job . . .

A challenging opportunity to direct the Ontario sales effort of a major company in a growth industry. Responsibility will include setting regional sales policy, training of sales personnel, high level contact with major customers. Performance will be judged on sales effectiveness. Future prospects are good.
Toronto location.

The Man . . .

35 to 45 years old, he is a seasoned sales executive. His experience is in sales to producers of consumer goods, preferably food, beverage or drug. He is well known to senior executives in Ontario in all or some of these areas. Personable, he is intelligent, energetic and mature.

Please reply in complete confidence to:

PAYNE-ROSS
LIMITED
management consultants
11 ADELAIDE ST. W., TORONTO

WANTED Asst. Gen. Mgr.

Prominent machinery manufacturer. Employs 125. New licenses prominent lines create excellent opportunity. $1,000 month. Near Toronto.

BOX 780,
THE FINANCIAL POST, TORONTO

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CONTROLLER

Automotive parts manufacturer needs aggressive man with broad background in general accounting, standard cost procedures and budgets, to supervise accounting department.

Must have demonstrated ability to function at staff level. Relocate.

Send resume with complete information on education, experience and personal data to:

BOX 781,
THE FINANCIAL POST, TORONTO

Chemical Engineer

Required for a Responsible Position with an International Food Manufacturing Organization

The successful candidate will hold a degree from a recognized university, accept responsibility and be prepared to make a rewarding future for himself. Excellent salary and benefits.

Apply Box 797,
The Financial Post, Toronto

BACTERIOLOGIST

Required by International Food Manufacturing Organization

To work with Quality Control in Bacteriological and Chemical Analysis of ingredients and finished product, both heat processed and frozen.

Candidates must hold B.Sc. in Bacteriology. Resume of education and experience should be mailed to

Box 796,
The Financial Post, Toronto

BUSINESS FOR SALE

Small industrial sales company in Toronto, complete with machine shop. This is an opportunity for person with sales and management ability to acquire control of going concern, with only a nominal cash payment, as present owners have other interests and desire quick sale.

BOX 807,
THE FINANCIAL POST, TORONTO

EXECUTIVE PLACEMENT CENTRE for *Executives at all levels*
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Chemist

Required for a Responsible Position with an International Food Manufacturing Organization

The successful candidate will hold a degree from a recognized university, accept responsibility and be prepared to make a rewarding future for himself. Excellent salary and benefits.

Apply Box 798,
The Financial Post, Toronto

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TRAIL OFFICE
REQUIRES

PHYSICISTS

Challenging career opportunities are available for physicists particularly in the "Solid State" field. Excellent opportunities are provided for broad professional development.

Cominco is becoming an important supplier of Electronic Materials for an international market. Research, development and manufacturing programs are expanding and openings have been created for physicists with PhD., M.Sc., or B.Sc. training interested in this important new section of the metals industry.

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- 111-V Compound Semiconductors
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Enquiries are invited.

Please write to:

J. A. GRAY,
Personnel Division,
THE CONSOLIDATED MINING AND SMELTING COMPANY OF CANADA, LIMITED,
TRAIL, B.C.

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THE PLACEMENT AGENCY FOR QUALIFIED OFFICE AND SALES PERSONNEL
Permanent and Temporary
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PUBLIC RELATIONS

If you're a man, between 25-35, who:

- Is mature in outlook and dependable in performance.
- Has several years' experience in writing-editing.
- Has initiative, imagination and willingness to work.
- Possesses some knowledge of business and marketing—or can learn.

Then there's a job opportunity for you in the Public Relations Department of a major Canadian industrial company. You must be free to travel and to work in either Montreal or Toronto. Bilingualism would be an asset but is not essential. If you have the qualifications we're seeking, we will interview you almost anywhere. Please apply to

BOX 787, THE FINANCIAL POST, TORONTO

SENIOR ECONOMIST

Required to head Economic Research department of the Oil and Gas Conservation Board, Calgary, Alberta. Must be aggressive, self-reliant and capable of directing medium sized research staff. Four to eight years related experience required.

University graduation in Commerce, Arts or Science with specialization in Economics and Statistics. Preference given for post graduate studies.

Initial salary will be from $6,000.00 to $7,200.00 per year, based on experience.

Replies to

BOX 790, THE FINANCIAL POST, TORONTO
giving full details of age, education and experience, will be kept confidential.

MECHANICAL ENGINEERS CHEMICAL ENGINEERS

needed for

PROJECT ENGINEERING

Experience in design for heavy industry essential; petroleum refinery or chemical plant experience desirable. Positions require administrative ability as well as engineering experience.

Send full details by letter only to:

Chief Engineer
CANADIAN BECHTEL LIMITED
100 UNIVERSITY AVENUE, TORONTO

L S

GENERAL MANAGER

LIFE INSURANCE

An unusual opportunity exists for a mature and experienced Life Insurance Executive to open up and develop a Canadian subsidiary of a strong foreign Insurance Company.

Candidates must have adequate Life Insurance and suitable supervisory experience, or be senior salesmen capable of moving up. They must also have the ability to develop a solid Canadian business and grow with it. Operations could start in either Montreal or Toronto.

AGE: 35 - 50 REMUNERATION: $15,000 - 20,000 area

Applications, which will be held in confidence, should give full details including present salary.

Leetham, Simpson Limited
Management Consultants
EXECUTIVE PLACEMENT DIVISION
2100 Drummond St., Montreal VI 9-6338

REQUIRED IMMEDIATELY

For

New Kraft Pulp Mill in British Columbia

OPERATORS FOR EVAPORATORS, RECAUSTICIZING, BROWN STOCK, KILN AND ALSO BLEACHERY ASSISTANTS, DIGESTER ASSISTANTS, LAB ASSISTANTS, BALERMEN AND TRADESMEN

Applications for employment are being accepted from fully experienced pulp mill operators and tradesmen for the above positions. Only fully experienced personnel will be considered.

Celgar Limited is building a 500-ton bleached kraft pulp mill at Castlegar, B.C., one of Canada's finest residential locations.

This is a well-established Company offering employment opportunities in a modern mill and attractive welfare plans. Housing assistance and partial moving expenses will be provided.

Experienced personnel are invited to submit a confidential detailed letter of application to:

CELGAR LIMITED

PULP MILL DIVISION
BOX 1000
CASTLEGAR, B.C.

Also see the June 11 issue of this paper for our advertisement covering other positions such as PULPING GROUP LEADERS, MACHINE TENDERS, COOKS, BLEACHERY OPERATORS AND TRADE GROUP LEADERS.

V 5929-2

SALES MANAGER

Established organization requires capable Sales Manager to direct sales activities across Canada. Applicants must be free to travel and reside in Toronto.

Excellent opportunity for man 35-45 with supervisory experience and administrative ability, who knows the Food industry, particularly the Industrial and Institutional field and who is looking for greater scope and responsibility.

Salary commensurate upon experience and ability — reply, in confidence, stating age, education, experience and past earnings to:

BOX 803, THE FINANCIAL POST, TORONTO

PUBLIC RELATIONS—EDITORIAL

The Public Relations Department of a national company has an opening in its Montreal office for a young man with newspaper, magazine or employee publications experience and interested in making a career in the general field of public relations.

The successful candidate will begin as assistant editor of a company-wide employee newspaper. He will write news and feature material, direct the taking of pictures, work on layouts and other aspects of production.

Two years' editorial experience essential and some university training desirable. Age—24-30.

Please write

BOX 788, THE FINANCIAL POST, TORONTO
giving details of qualifications and experience.

DIRECTOR OF PRODUCTION

Substantial Salary to be Discussed

The Job . . .

A growth opportunity offering a great professional challenge in a multi-plant company. Responsibilities will include the development and implementation of a major cost reduction program, development of standard procedures, production planning, and industrial engineering, with a view to maintenance of cost and quality standards. There are opportunities for advancement.

The Man . . .

35 to 45 years of age, he is an engineer with experience in both mechanical and industrial engineering. He has sound knowledge of modern manufacturing techniques probably gained through direct responsibility for running one or more plants. A determined leader, he is energetic and confident.

Please reply in complete confidence to:

PAYNE-ROSS
LIMITED
management consultants
550 SHERBROOKE ST. W., MONTREAL

MARKETING EXECUTIVE

(MONTREAL AREA)

There is an excellent opportunity in a large internationally known organization in the consumer goods field for a well experienced and fully qualified executive. The applicant should be between 30 and 40 years of age and have a thorough knowledge of and at least ten years' experience in marketing. A varied experience in field sales, brand promotion, advertising, sales promotion or sales management is desirable.

The position offers scope and heavy responsibility, consequently the applicant must have the ability to think creatively, plan, use initiative and possess superior intelligence. The salary is open and will be commensurate with qualifications.

All replies will be treated with the strictest confidence. Key members of our organization are aware of this advertisement.

Reply giving full particulars and stating salary expected to:

P.O. Box 111,
Snowdon Post Office, Montreal 29, P.Q.

CANADIAN INTERNATIONAL PAPER COMPANY

requires

ECONOMIST

to select data, develop forecasting systems and prepare forecasts of industry output of the products which the Company produces. Included in the work will be forecasts and analyses of the major segments of the economy affecting the sales of our products.

Applicants should have post-graduate degrees in Economics and Statistics.

This is an excellent opportunity for initiative and analysis in the broad field of Economic Planning and Market Research. Advancement opportunities are good in one of Canada's largest pulp, newsprint, and converted paper products company.

Replies will be treated in confidence and should contain full particulars on education, experience, age, marital status, salary expected, etc.

Please write to the Company at:

Room 942, Sun Life Building, Montreal, P.Q.

J. B. Fraser Executive Placement Consultants Ltd.

Canada's leading Executive and Professional Placement Company, serving Business, Industry and Executives from coast to coast for nearly a quarter century, invites your confidential enquiries.

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MONTREAL—VI. 2-9835
The Drummond Building
1117 St. Catherine Street West

Are you a good Manager?

Have you demonstrated outstanding ability to MANAGE in

Production
or
Industrial Relations
or
Military Business
or
Purchasing
or
Sales?

If you have a solid record of achievement and feel that your present position is one step below your capabilities, we may have the opportunity you are seeking.

You must have drive, imagination and true ability to lead and develop people.

Please furnish, in confidence, complete résumé and salary requirements.

Box 777,
The Financial Post, Toronto

SALESMAN WANTED

for Eastern Ontario. We sell a collection service; prospects are businessmen. Good hours but involves some travel. Sales experience necessary, preferably in our line. Commission with draw; our salesmen average eight thousand yearly. Write Dixon Commercial Investigaters Ltd., Bank of Nova Scotia Bldg., St. Catharines, Ontario.

ONTARIO PSYCHOLOGICAL CENTRE
OPC
For aptitude and executive assessments. Educational and career planning.
97 Eglinton Ave. E., Toronto HU. 1-6362

GENERAL MANAGER

for

Multiple plant operation — located in the United States.

Canvas and rubber footwear production experience necessary.

Reply in confidence to

Box 792
The Financial Post Toronto

L S

SALES MANAGER

Business Equipment

For a sales executive who has himself sold business equipment, and who is now directing the activity of a sales office, this position offers an opportunity to move into senior sales management, reporting directly to a Vice-President of sales.

He will be responsible for the direction and co-ordination of branch offices, and for the development of sales objectives, policies and plans. In addition to his sales responsibilities, he will contribute to the determination of company marketing strategy, particularly in the areas of market intelligence, public relations and product promotion.

Experience with data processing equipment is essential.

AGE: 35-45 SALARY: $15,000 - 20,000

Applications, which will be held in confidence, should give full details including present salary.

Leetham, Simpson Limited
Management Consultants
EXECUTIVE PLACEMENT DIVISION
2100 Drummond St., Montreal VI 9-6338

Construction Hits New High

Construction contract awards reached a new high for the first five months of 1960, 13.5% above the figure for the same period last year and 1.7% above the previous high in 1958.

Heavy gains in engineering construction, plus good gains in business and industrial offset the slowdown in residential building.

Regionally, Ontario, Atlantic region and the Western area showed healthy gains while Quebec was down a bit from last year, **Hugh C. MacLean Building Reports** show.

Five-month national cumulative total for 1960, was $1,317,799,800, or $157.2 million higher than the comparable figure last year and $22.4 million higher than the 1958 figure.

Percentage changes for the various categories and regions for the same period in 1959 and 1960: residential, down 40.1%; business, up 18.3%; industrial, up 21.1%; and engineering, up 99.1%. Atlantic region, up 27.3%; Quebec, down 10.1%; Ontario, up 25.9%; Western, up 12.1%.

Total of contract awards for May, 1960, was $300.9 million, down $55.6 million from the previous May. For the month, residential shows a 42% loss, business is up 19.1%, industrial is down 19.7% and engineering is up 76%.

National figures for May, 1960, in millions of dollars (with 1959 figures in brackets):

Residential, $76.9 ($132.6); business, $109.5 ($91.4); industrial, $15.4 ($75.6); engineering, $99.2 ($56.4).

Comparative national cumulative figures for each category for the first five months of 1960 in millions of dollars (with comparable 1959 figures in brackets):

Residential $263 ($439); business, $417.7 ($353.1); industrial, $150 ($123.9); engineering, $487 ($244.7).

Comparative regional cumulative figures for the first five months of 1960 (with 1959 figures in brackets):

Atlantic region, $124.1 ($97.5); Quebec, $263.9 ($293.4); Ontario, $610 ($484.4); Western, $319.8 ($285.4).

Regional analysis for May, 1960:

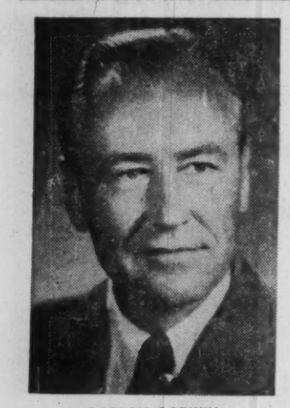
Atlantic region: In spite of losses in residential, business and industrial, a good gain in engineering pushed the May total up to $22.6 million, a gain of $1.9 million over the 1959 figure.

Quebec: healthy gains in business and engineering were offset by heavy losses in residential and industrial. Total was $104.7 million, down $26.1 million from the May, 1959, level.

Ontario: engineering showed a slight gain but was smothered by losses in the other three categories. Total of $96.6 million is down $19.5 million below the total for last year.

Western: gains in business and engineering were nullified by losses in residential and industrial. Total of $77 million is down $11.9 million below the May, 1959, figure.

ANNOUNCEMENT



GORDON GODWIN

of St. Catharines, whose appointment as vice president—woodlands, of the Ontario Paper Co. Ltd., and its subsidiary, Quebec North Shore Paper Company, is announced by Arthur A. Schmon, president and general manager. A graduate in forestry from the University of Washington, Mr. Godwin has been associated with Ontario Paper Company since 1939.

Oppose Westalta Permit For Gas Product Export

From Our Own Correspondent

CALGARY—A bid to export Alberta's surplus natural gas by-products is running into stiff opposition in hearings here before the Alberta Oil & Gas Conservation Board.

The applicant is **Westalta Products Pipe Line,** a subsidiary of **Pembina Pipe Line Ltd.,** Calgary, which seeks board approval to transport the by-products to the Great Lakes (**FP**, April 9, May 28).

Intervenors in the application include **Trans-Canada Pipe Lines Ltd., Interprovincial Pipe Line Co., Hudson's Bay Oil & Gas Co.**

In the main, all maintain that present facilities or adjustment to them, are or will be sufficient to transport the liquid petroleum gas in and out of the province.

Trans-Canada told the board that construction of several extraction and fractionation plants, enabling shipment of butanes and propanes in a suspended form in its system, is economically feasible. It adds that the Westalta project might jeopardize its plan.

Interprovincial proposes to transport Alberta's LPGs when the supply and markets are available.

President T. S. Johnston emphasized that the unit cost of transportation of LPGs by his system which already has the reserve capacity is bound to be appreciably lower than the unit cost of a completely new system.

Hudson's Bay pointed out that there are pipelines already existing in Alberta which could be used to transport natural gas by-products. It stated that its own Rangeland Pipe Line has the space to transport condensates to arterial pipelines in Edmonton.

Another intervenor, **Home Oil Co.,** objected on entirely different grounds.

Home Oil states that unless Westalta can prove its export project would not affect the marketing of Alberta crude in the U. S., its application should be turned down.

Home expresses fear that shipment of an estimated 40,000 b/d of by-products to the south might make the U. S. restrict Canadian crude imports.

Canadian Chemical Co., Edmonton, said that if export of LPGs is permitted, it is essential that the needs of Alberta processors are satisfied first. The company plans to increase its use of propane and butane from 750,000 bbl. per year to 1.2 million bbl. per year.

Westalta experts say their studies indicate that Alberta gas by-product production will increase from 33 million bbl. per year in 1962 to 86.7 million bbl. in 1981.

Metro trends:

Both Montreal and Toronto showed decreases in volume during the first five months of the year. Toronto's five-month total is $150.7 million, down $36 million from 1959. Montreal's five-month total is $164.3 million, down $12 million from last year.

Both centres showed strength and weakness in the same categories. Business and engineering were up, residential and industrial were down.

Municipal Bureau Elects Officers

A. Hazlett Lemmon has been re-elected president of the Bureau of Municipal Research for 1960-61.

He is vice-president and treasurer of the **Canada Life Assurance Co.,** Toronto.

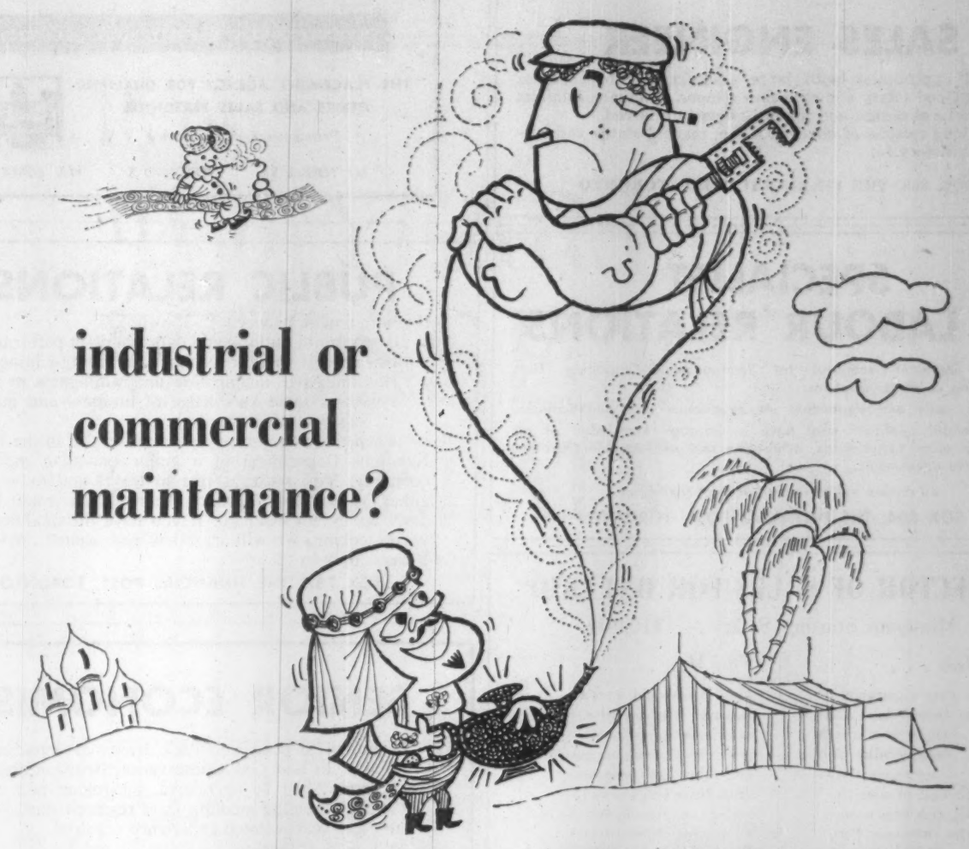
LEMMON

The bureau, 46 years old, is a research organization devoted to improving local government operations throughout Metropolitan Toronto. It consists of businesses, associations and individuals.

Other officers:

Kenneth B. Andras, **Andras, Hatch & McCarthy,** becomes a new vice-president; H. K. McIntosh is re-elected a vice-president; and J. Aubrey Medland continues as honorary treasurer.

Director and secretary is Eric Hardy.



industrial or commercial maintenance?

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High, skilled electrical, plumbing, heating, piping, air conditioning and refrigeration experts who can be in your building or plant within 30 minutes, day or night, to take care of any emergency, are available to you through Black & McDonald Limited.

This new, 'round-the-clock' electrical and mechanical service offers important savings by reducing emergency manpower carried on your regular staff. Black & McDonald men, in any required numbers, are on immediate call to assist your maintenance staff or to take over full and continuing responsibility for your electrical or mechanical needs.

We would like to tell you more about worthwhile maintenance savings . . . and how efficiently Black & McDonald experts can implement your present staff . . . day or night.

BLACK & McDONALD LIMITED

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ELECTRICAL • PLUMBING • HEATING • PIPING • AIR CONDITIONING • REFRIGERATION

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does everything any other postage meter can do ...and offers all these extra advantages

Postalia is a printing unit in itself—prints independently of a base, yet fits any Postalia drive, letter or mailing automat.

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Postalia lets you set any stamp denomination from 1¢ to $9.99.

Postalia lets you prepay any amount up to $9,999. in multiples of ten.

Postalia is the only postage meter with a fully automatic inking device for all models—one filling gives several thousand prints.

Postalia, unlike other postage meters which weigh as much as 18 lbs., weighs only 5 lbs. —easy to carry for prepayment.

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McBEE

The McBee Company Limited, 179 Bartley Drive, Toronto 16, Ontario

ALSO IN PRINCIPAL CITIES ACROSS CANADA

ANNOUNCEMENT

PITMAN-MOORE APPOINTMENT

FRANK A. SCHOTTELKORB

The election of Frank A. Schottelkorb as president and a director of Pitman-Moore of Canada Limited has been announced by J. L. McKee, president of the parent Company, Allied Laboratories, Inc. Formerly vice-president and sales manager, Mr. Schottelkorb joined the Canadian Company in 1957, after extensive experience in the technical and marketing division of the Pitman-Moore Company in the United States.

SAFETY DIRECTOR

James Hermiston has been appointed safety director for **Perini Ltd.**, general contractor. Hermiston was formerly assistant general manager of the Construction Safety Association of Ontario.

INSIDE THE NEWS

Don't Worry Too Much About Europe's Tariffs

By J. K. EDMONDS

THE HORSE-trading now going on over trade and tariff arrangements in western Europe may turn out to be the least important of the developments affecting Canadian sales abroad.

There's no doubt that a fair break on tariffs is worth a hard fight.

But business history is full of examples of trade taking place across high tariff walls, provided demand is expanding rapidly.

The question is: How fast is European demand going to expand?

First witness: Dr. W. W. Rostow, author of "The Stages of Economic Growth — a Non-Communist Manifesto" which has become a best-seller in its field.

Dr. Rostow says western Europe is now in the same stage the U. S. went through in the 1920s. He expects very rapid expansion of mass consumption, keyed to the automobile, the supermarket and the household appliance.

(Between the 1920s, when the U. S. first reached this stage of mass-consumption, and the 1950s, when mass consumption was full-blown, Canadian exports to the U. S. increased more than fivefold. At no time did U. S. tariff and trade procedures make this easy.)

Second witness: A Canadian businessman just back from a 10-week tour of the European affiliates of his company, a trip he makes every two years.

He reports a marked change in the French attitude to durable goods, cars, and convenience merchandise.

"When they couldn't get these things," he says, "my French friends scoffed at them as manifestations of the crude, materialistic North American way of life. They argued at great length that only the French knew how to live: simply and elegantly.

"I must say this impressed me at the time.

"But now, I find the same people showing me their new deep-freeze or their new dishwasher, and raving about the wonderful ingenuity of the French who free themselves for the higher things of life by leaving the drudgery to machines.

"This just isn't the same market it was two years ago. The living standard in western Europe is undergoing not just a change, but a revolution."

(France — pop. 45 million — is one member of the Common Market whose level of tariff protection will **drop** as a result of the averaging of tariff rates among the Six. This won't affect the items on the special-treatment lists, which include most of Canada's traditional exports, but it will mean that new export opportunities might arise.)

Third witness: George W. Ball, U. S. legal counsel for the Common Market, speaking to a conference of the National Industrial Conference Board:

"The striking fact about the Common Market countries is that their economies have been developing at a much faster rate than our own. . .

"There is clear indication that the economies of the six countries have been driven by their own internal engine of growth rather than by response to developments in the U. S. . .

"It is safe to predict that the Common Market will provide a vastly greater economic arena in which these powerful forces of growth can make themselves felt.

"What may result — and already we can see the beginning signs of it — is an explosive development comparable to that which the U. S. experienced with the opening of the West."

Besides this prospect of increased consumption, there's another element in the common market that should mean more sales for Canada in the long run: A built-in bias in favor of efficiency.

Here's one point that is sometimes missed. It's made by F. Aley Allan, staff counsel, **Atomic Industrial Forum Ltd.**, in another speech to the NICB conference.

"The council of ministers is the Common Market's chief institution. The final power of decision and the principal legislative power belong to it.

"It is possible for these national representatives, acting in concert, to lay down, for the entire Common Market area, including their own countries, **policies they might be quite unable to adopt at home over the opposition of their local parliaments**. . .

"Thus, if the executive authorities in the Common Market countries can agree in advance to general measures of monetary, investment, or other basic aspects of economic policy, they have the power, by concerted action in the council, to circumvent the conservative elements in the parliaments of the six countries."

For Canada, the most important point here is that, if the expected industrial expansion takes place within the Common Market area, the council of ministers may be able to institute agricultural "rationalization" without being hampered by powerful political farm blocs.

Canada's chances of selling farm products within the area would be improved if this occurred.

It's a good gamble — and it's one reason we shouldn't be sorry to see more delay in reaching agreement on agricultural tariff policy for the Common Market area.

Company Reports

Financial

GROUPED INCOME SHARES LTD., Vancouver, net profit of $221,982 for year ended March 31, 1960, was 14.8% lower than previous year's net of $260,690.

Net assets increased 5.3% to $8,419,781. Number of shares outstanding increased to 2,468,349 from 2,050,063.

CONDENSED INCOME & SURPLUS ACCOUNT

Years Ended Mar. 31:	1960	1959
Invest. inc.	$291,338	♣$311,734
Less: Gen. & adm. exp.	52,426	36,230
Income taxes	5,180	4,758
U. S. withholding taxes	11,750	10,056
Net profit	221,982	260,690
Add: Divd. equal.‡	13,800	20,508
Less: Divds.	235,782	281,198
Surplus for year	nil	nil

♣Includes $70,200 taxable portion of a nonrecurring distribution by Gypsum, Lime & Alabastine, Canada Ltd.
‡Trans. from capital redemption reserve.

Earnings per Share and Dividend Record:

Special & com.	$0.09	$0.13
Paid	0.0995+stk.*	0.142+stk.

*Stock dividend amounting to 10 cents per share in each year, redeemed immediately.

Shares o/s as at March 31:		
Special, 50c par	2,466,349	2,048,063
Common, 50c par	2,000	2,000

BALANCE SHEET

As at Mar. 31:	1960	1959
Cash	$164,288	$184,915
Invest., mkt.▲	8,224,824	7,955,186
Due from brokers	9,229	32,915
Income rec.	41,538	38,127
Total assets	8,439,879	8,311,143
Due to brokers	383	195,994
Accts. pay.	7,510	6,791
Prov. for taxes	4,200	3,083
Grouped Fd. Dist. Ltd.	8,000	7,587
Capital stock	1,234,174	1,025,031
Capital red. res.	6,298,101	5,257,509
Unreal. apprec. inv.	●33,210	1,067,885
Capital surplus	930,716	647,183
▲Cost	8,258,034	6,687,301
●Debit.		
Net assets per sh.	3.43	3.91

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The Royal Bank of Canada

The rights recently issued to shareholders of the Royal Bank expire on Monday, June 27, 1960.

We urge holders to make arrangements for the sale or exercise of their rights without delay. The rights will be valueless after the date of expiry.

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WINNIPEG, MAN. WH 3-4457
LONDON, ONT. GE 4-2741
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250 YEARS
MEISSEN
PORCELAIN
(DRESDEN CHINA)

The sign of the "Blue Swords" conveys to people all over the world the notion of highest culture, artistic perfection and unexcelled quality. Dresden China was already for sale at a market of international importance, the Leipzig Fair, 250 years ago. Ever since the foundation of the manufactory in the Meissen Albrecht Castle in 1710 the porcelain produced at this place has fulfilled all requirements of a highly distinguished table culture.

The rediscovery of porcelain in Europe was the result of long years of experiments conducted by the former alchemist Johann Friedrich Boettger. The famous painter Johann Gregorius Hoeroldt and the renowned sculptor Johann Joachim Kaendler gave this discovery its figurative artistic form.

Backed by a 250-year-old tradition, the variety of designs and patterns for dishes and the richness of the Dresden art porcelain has remained unexcelled until today.

Today, 250 years after its foundation, the Meissen manufactory, which enjoys the support of the Government of the German Democratic Republic, is at the peak of its artistic creative power.

GERMAN DEMOCRATIC REPUBLIC

VEB STAATLICHE PORZELLAN-MANUFAKTUR MEISSEN

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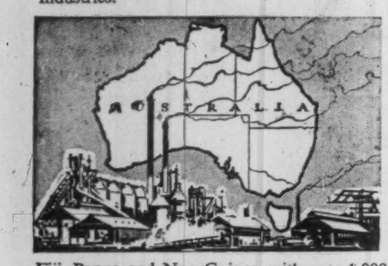
AUSTRALIA OFFERS
opportunities for industries

With its rapidly expanding local market and proximity to South-East Asian markets, Australia continues to provide opportunities for industries.



If you are interested in Australia and require industrial, economic, or market information, you are invited to use the comprehensive facilities of the Bank of New South Wales, the oldest and largest commercial bank operating in Australia, New Zealand, Fiji, Papua and New Guinea, with over 1,000 branches and agencies.

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European Roundup

The Possibilities In Spanish Trade

By ERNEST WAENGLER

WHEN SPAIN inaugurated its Economic Stabilization Program a year ago and promised far reaching trade liberalization, the scheme was greeted with scepticism at home and abroad.

Today the project is so successful that the government is applying brakes to check what could become a runaway boom.

Up until July 21, 1959, all Spanish foreign trade was bilateral. On that date, four categories of trading were established:

- **Liberalized goods**, no longer subject to import licences or quantitative restrictions, though the importer still has to submit a declaration of prices (the government sets minimum and maximum prices for all import commodities).

These include some raw materials, meat and some semi-finished and finished goods which are not produced in Spain.

- **Globalized goods**, for which an over-all quota is set, but which can be imported from any country on the "global list".

Canada is one of the countries listed. Globalized goods are most semi-finished products of the chemical and iron and steel industries, pulp and paper etc.

- **State trade goods**, for which prices and quantities are set by the government and where the private trader only acts on behalf of the state.

These include such Canadian staple exports as wheat, synthetic rubber and polystyrene.

- **Bilateral trade goods**, for which licences are given on the basis of trade agreements with individual countries, mostly member countries of OEEC.

These include most finished products, especially those also made in Spain.

At present, Canada has no trade agreement with Spain.

Though cumbersome and restrictive by our standards this system has given a tremendous stimulus to Spanish trading.

The spectre of inflation has disappeared, especially since the government tightened credit recently.

The devaluation of the peseta from 42 to 60 in relation to the U. S. dollar has done away with the black market in currency and changed last year's $200 million hard currency deficit into a surplus, since tourists no longer buy their pesetas outside the country.

This year, nearly five million tourists are expected to visit Spain and to bring in more money than any single group of export commodities.

* * *

A SOMEWHAT fanciful Swedish plan for preventing a split of Western Europe into two hostile trade groups is being widely discussed in government and business circles.

The idea, promoted by Sweden's Trade Minister Lange, is to treat the European Common Market as a single country and to make it a member of the more closely knit European Free Trade Area.

This, the Swedes feel, would preserve the unity of the Inner Six and yet prevent them from a protectionist trade war against the Outer Seven.

* * *

THE FRENCH National Assembly has approved an agricultural investment program which could prove extremely significant to Canada.

In the next three years, the government will invest over $400 million in the expansion of agriculture.

More than $110 million will go into the reclamation of new farm land, $150 million into irrigation and $55 million into additional electric power for agricultural areas.

By increasing its farm production, France hopes to become the sole food supplier to the European Common Market.

A mere 13% increase in French wheat production could make the entire Common Market area independent of wheat imports from the outside. At present, Canadian wheat accounts for almost a third of our exports to that area.

* * *

GERMAN industry is getting worried about the spectacular increase in long term credits to Soviet block countries.

Association of West German Industries warns that Russia and her satellites have succeeded in getting more and more credit from Western industries, which are trying to gain a foothold in the market.

As a result, the Association points out, the West is financing the rapid industrial expansion of the Eastern block and aiding its export drive in the underdeveloped countries where the communist countries are competing vigorously with the West.

* * *

ONE EXAMPLE of such competition has just come forward from East Germany which is announcing a "global" plan for assistance to development countries and the creation of a Council for Economic Co-operation with Africa and Asia.

In addition, East Germany has sent a sales team to Cuba to negotiate a trade agreement under which Cuba is offered machine tools, optical and mechanical products and radios in exchange for sugar, coffee, tobacco and spices.

East German trade offices have recently been established in the United Arab Republic, India and Iraq and another will shortly be opened in Cuba.

STEP-LADDERS

A new line of aluminum stepladders for general household use has been announced by **Chesley-Sarnes Ltd.**, Essex, Ont.

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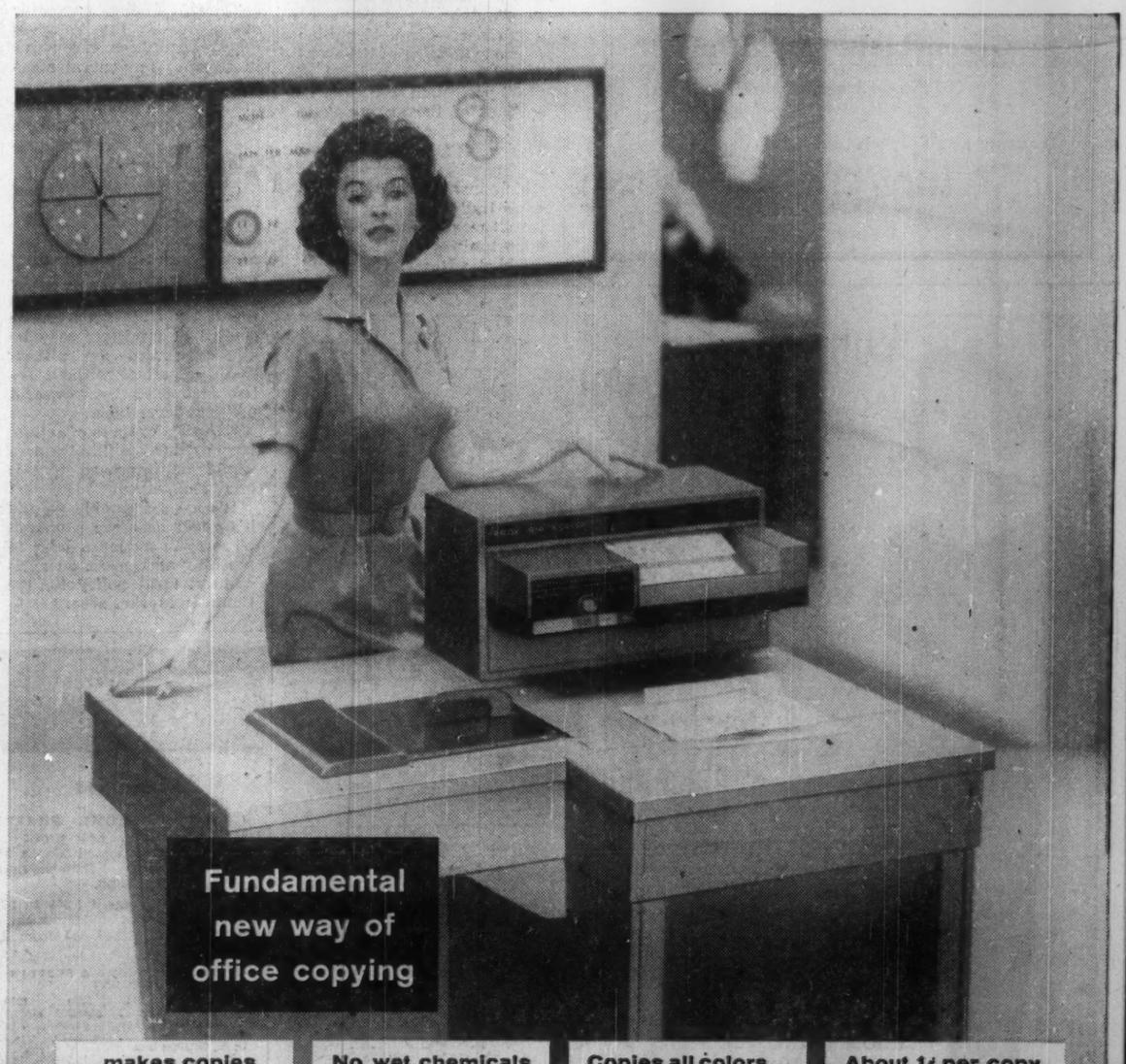

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Every man—and every woman—teeters on the brink of two great economic pitfalls: they may *live too long* or, they may *die too soon!*

Men and women who have outlived their savings may become dependent solely upon Old-Age Security. Most people don't want to be a burden to their children or have to rely on disguised charity.

Similar hardship is experienced by the family which loses, through disease or accident, a young husband and father who earned the income that paid the bills.

Through investing around 10% of net earned income (after taxes) in *permanent personal policies* of life insurance a man or woman can provide a *guaranteed* and reasonable income to themselves when old *or* to their families in event of untimely death.

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70 years of service to Canadians
Branch Offices in principal cities from Coast to Coast in Canada.

May Starts Down But NHA Loans Up

By FORBES GILBERTSON

Housing starts for May this year were down about 40% compared with May, 1959.

The drop for the first five months was at the same rate.

May starts totaled 6,755 and for the five-month period, 20,697, in centres of 5,000 population and over.

At the same time, more NHA loans were approved during May, sparked by the government's direct loan program, than during the previous four months of this year.

Loans for the month were estimated at over 3,600, while total for the year to June 3 were just over 7,000 approvals. This includes direct and approved lender loans.

The total of loans to June 3 was still down 55.7% from the corresponding period in 1959 but considerably better than the decline of 78.1% reported to the end of April.

NHA loans for May were down 22.8% from the same month in 1959.

But, while May presents the brightest picture in the year so far, builders say loans will have to continue to increase for the balance of the year to come anywhere close to the 125,000 starts originally estimated by the federal government.

A major building supply manufacturer revised his previous gloomy estimate of starts upward but still gave as his most optimistic figure 112,000 starts.

Meanwhile, builders received what they feel is a setback this week when the federal government refused to advance direct loans to enable them to erect model homes for display during National Home Week in the fall.

The government is reported to have given as its reason for refusal the fact that it fully expected all direct loan money would be needed to take care of home-owner applicants.

Builders say they count on the model homes to boost sales and win customer orders for winter building and that it will mean a curtailment of winter building next year.

Some builder associations across Canada have been able to arrange loans from approved lenders but others who had to count on the hope of direct loans from the government will be out of luck.

Rumor has it that public works minister Walker will make an up-to-date statement on the housing situation sometime before the federal parliament prorogues.

It's felt he'll discuss the whole mortgage picture, make a new statement or reaffirmation of government policy on direct loans and possibly settle once and for all the question of whether banks could make loans above 6%.

ANNOUNCEMENT

WILLIAM R. SEUREN

El Dorado, Ark. — William R. Seuren has been employed as vice president—marketing of Murphy-Canada Oil Company, a wholly owned subsidiary of Murphy Corporation, C. H. Murphy, Jr., president of the parent company, has announced. Seuren will be manager of the Eastern Canada Marketing properties of the company and be headquartered at Toronto, Ontario, Canada.

A native of Stockton, N.J., he received a B.S. degree in chemical engineering from Pennsylvania State College in 1942 and a Master's degree in the same field from Massachusetts Institute of Technology in 1947. He was graduated from Harvard Business School in 1949 with an M.B.A. degree in marketing and production.

Seuren has been sales vice president of Frontier Refining Co. of Denver, Colo., since 1955 and a member of the company's Board of Directors since 1956.

The nucleus of Murphy's Canadian marketing operations is the properties of Vigor Oil Co., Ltd., and independent oil marketing concern, which was acquired by Murphy-Canada in July 1959. The company has facilities for retail and wholesale distribution of petroleum products in the Toronto-Oshawa area bordering the north shore of Lake Ontario.

"Seuren's appointment coincides with Murphy Corporation's acquisition of 80% ownership of Amurex Oil Company, a producing company operating in Canada, and is a further expression of Murphy's interest in all phases of the petroleum industry in Canada," a spokesman said.

Fight With Agents Brings Combines Cops

Companies selling auto insurance in Canada on pre-established schedules of rates and commissions say they are not worried by the report on their activities released this week by the Restrictive Trade Practices Commission.

The report is the product of a seven-year study by the commission into charges that two large groups of underwriters were restricting competition in the auto insurance business through the "fixing" of rates and commissions.

The complaint was laid in 1953 by the Canadian Federation of Insurance Agents following a reduction in the rate of commission paid to agents by the groups of from 5% to 7½%.

Officials of one of the groups—the Canadian Underwriters Association — said this week that its member companies would give serious study to a suggestion from the report that operational procedures in part of the auto insurance business be reviewed.

"We find it significant," the official said, "that after a study of seven years' duration by the director of the investigation and the commission, the commission makes no statements that any practices of the insurance companies are contrary to law or to the interests of the public.

"Nor does it 'intend to consider any legislative suggestions'.

"It merely states that 'Some of the rules, methods and activities of (CUA) organizations and companies have features which might . . . be held to infringe upon the law'."

CUA officials said that it would take "some time" to review and act on the 224-page report released by Justice Minister Fulton.

"After all," they said, "the investigation took seven years because it was dealing with a highly complicated situation, and we cannot answer seven years' work overnight."

Other spokesmen have pointed out that much of the detailed information compiled by the commission was limited to the period 1949-52.

Things have changed so much since then that the information has mainly lost its value, they say.

It was also noted that the working together of insurance companies to stabilize auto rates has not had the usual effect of a combine (if such were the case). The CUA's share of total business has declined since the early 1950s, and now accounts for about only one third of all the auto insurance written in Canada.

A spokesman for the other group of underwriters studied by the commission — the Independent Insurance Conference—felt that the suggestion that the cost factor be reviewed much more frequently than in the past overlooked the fact that it was reviewed every year by both the CUA and IIC.

He also stressed that the "Green Book" of statistical experience upon which rates for the following year are based by the CUA and to a lesser extent, the IIC, although put out under the name of the CUA, contains information supplied by all the auto insurance companies in Canada, whether members of the two rating groups or not.

This exchange of information benefits all insurers and is as important to the members of the two groups as the setting of uniform rates, he said.

Any member who wishes to deviate from the rates suggested by the rating bureau is perfectly free to resign from the association, and in the past few years a number of companies have taken this step.

The commission advised the rate-setting associations to consider ending the practice of setting fixed rates of commission for insurance agents of member companies.

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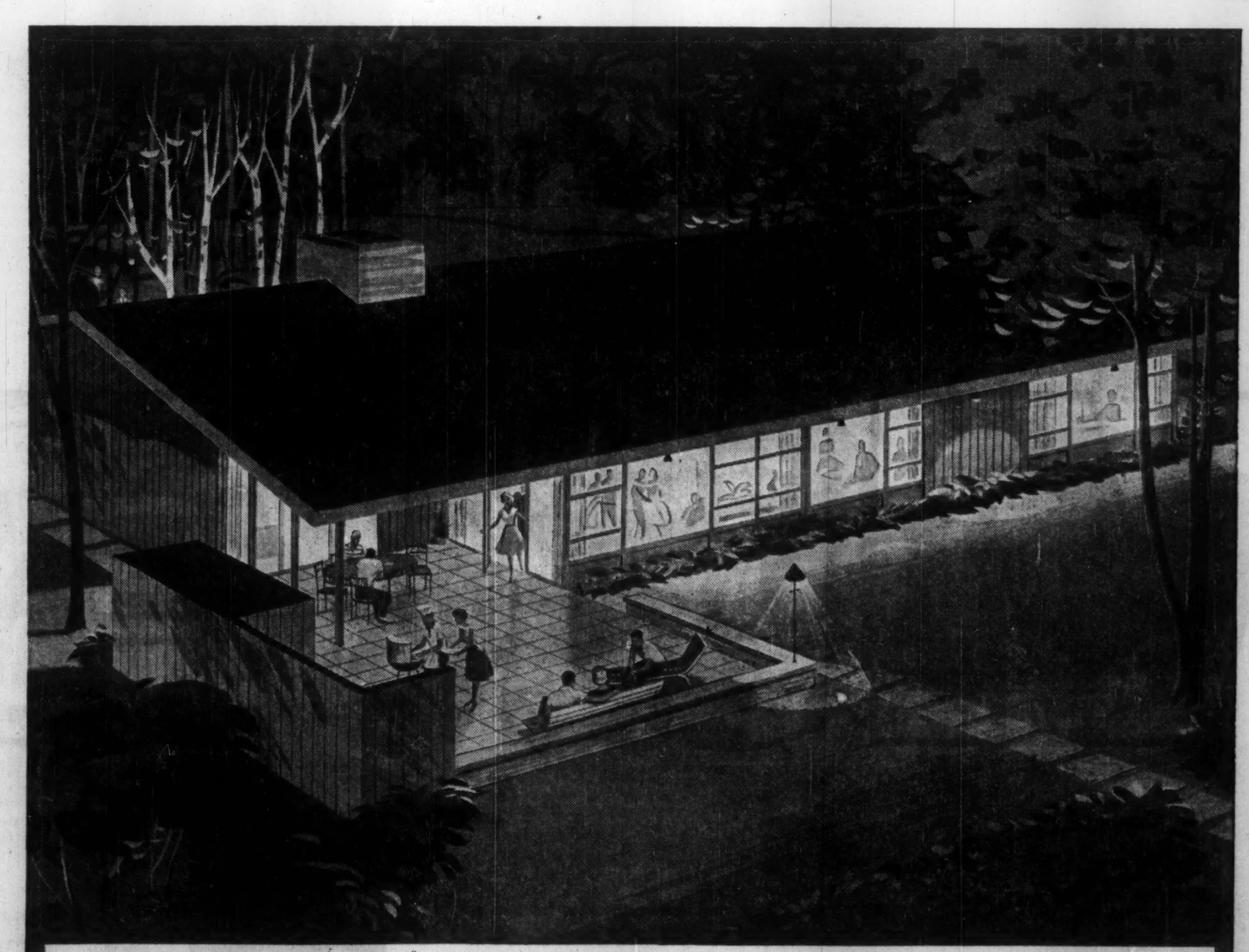

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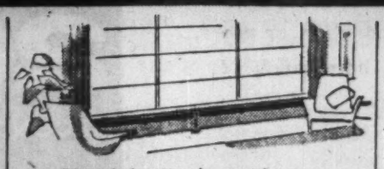

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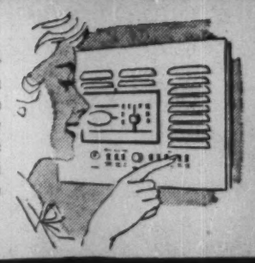

What's New

New products, new uses, new ideas, new money-makers. FP reports them here and invites contributions. Write to FP, 481 University Ave., Toronto.

BUSY EXECUTIVES frequently called upon for speeches or lectures can use a miniature teleprompter, which fits in a suitcase. It holds the script on spools and automatically moves it across an illuminated panel at a speed you control.

* * *

TELEPHONE TIMER helps control phone bills, distributor says. Bubble in crystal-clear styrene tube, which clips to your phone, rises in exactly three minutes, resets with a flip of the finger. High viscosity silicone oil in tube compensates for temperature changes. Bracket also holds a dialer-pencil.

* * *

COLOR-MATCHING equipment —for such industries as paint manufacture, fabrics, color printing, paper making and cosmetics — simulates north sky daylight, U. K. maker says. The light is blended and diffused output of fluorescent and filament lamps. The unit measures 24½-in. long by 18¾-in. deep by 14½-in. high and weighs 30 lb.

* * *

Phone Timer

TENT MATERIAL developed by the Department of National Defence is a vinyl-impregnated weave of a plied yarn, half nylon and half cotton. In comparison with No. 10 or 12-oz. cotton duck, the Defence Department reports that the new cloth proved "markedly superior" in laboratory tests for weight, tensile strength, tear strength, shrinkage, water resistance, loss of strength in weathering, flex abrasion and low temperature flexibility. It resists flame, survives burial in the ground and "breathes" air just as well as specially treated cotton duck, maker says.

* * *

Prompter

MATTING for industrial or household use is made from used rubber. It is easily rolled, lies flat and has no wire in the construction. Maker recommends it for building entrances or as a fatigue mat.

* * *

TURN INDICATOR for ships is designed to avert collisions at sea. The directional signal consists of two horizontal enclosures which are mounted port and starboard atop the pilot house or on the radar antenna mast. Each of the enclosures is fitted with a high-powered, sealed-beam light, which illuminates amber-colored arrows.

* * *

ALL-GLASS PUMPS for conveying corrosive liquids of water-like consistency — and for keeping an eye on them — have been developed by a U. K. company. They are of the centrifugal type and run at medium speed. They are mounted on heavy cast-iron base plates and have to be primed.

* * *

THERMOMETER can be read in the dark. Set in a plastic case, the tube shows up in the dark as a bright green, while the mercury level and temperature markings stand out in black. Its uses range from photographic darkrooms to greenhouses, says the maker.

* * *

NEW LITERATURE: Canadian Armature Works Inc., Montreal, has a new catalogue of its ventilating, heating, refrigeration and electrical equipment . . . **Commercial & Press Photographers' Association of Canada, Inc.**, Toronto, has new directory of members . . . Brochure on materials handling equipment available from **Service Steel & Engineering Ltd.**, Hamilton . . . Booklet on Windsor, Ont. from Greater Windsor Industrial Commission, Windsor . . . Bulletins on vibratory finishing and finishing equipment from **Lord Chemical Corp.**, York, Pa. . . . Catalogue describes coil products of **Chicago Standard Transformer Corp., Chicago, Ill.** Folder details four methods of mechanical deburring from **Wheelabrator Corp.**, Mishawaka, Indiana.

THE INVESTMENT FUNDS

Axe-Templeton Fund Per Share Assets Up 4.9%

Axe-Templeton Growth Fund of Canada Ltd., U.S.-owned Canadian investment company, net asset value per share rose 4.9% to $7.72 (Canadian) at April 30, 1960 from $7.36 three months earlier.

Total net assets increased 5.2% to $4,666,563 from $4,435,516 at Jan. 30, 1960.

At the end of April, 1960, 22% of fund's assets were invested in bonds and preferred stocks as compared with 15% a year earlier. Of the balance of the portfolio, 46% is in Canadian common stocks and 32% in companies doing most of their business within the European Common Market area.

During the quarter, the fund increased its holdings of Canada treasury bills and purchased 6¼% preferred stock of **Alberta Gas Trunk Line Co.** with warrants attached.

Common stock of **Handy Andy Co.** was added to the portfolio and increases were made in five other common issues. Two other equity holdings were reduced.

Here are the changes for the quarter in detail:

	Amt. held Apr. 30'60	Chge. since Jan. 31/60
Bonds	$	$
Can. treas. bills	225,000	+25,000
Preferred		
Alta. Gas Trunk	75	+75
Common		
Crown Life	500	+50
Investors Syndicate	1,100	—2,900
Cdn. Chemical Co.	1,900	—1,900
N. V. Philips	402	+19
B.C. Forest Prod.	6,000	+3,000
Western Plywood	3,000	+1,220
Handy Andy Co.	7,210	+7,210
Ventures Ltd.	7,000	+1,000

Trading Stamp Challenge Case Set for June 28

The Toronto trading stamp case, which may affect stamp operations across Canada, has again been adjourned. A Toronto magistrate has set June 28 for the hearing.

The case, in which **Blue Chip Premium Co.** of Toronto is charged under section 369 of the Criminal Code (**FP**, May 21, May 7) with selling trading stamps to two Toronto merchants, was to have been heard June 9. Crown asked for a remand.

It is expected that the full concept of the law governing trading stamps will be challenged in the court.

The case, the first of its kind, was prepared under orders of Ontario's Attorney General Kelso Roberts (**FP**, Feb. 6).

IDB Loans Up $400,000

MONTREAL (Staff) — Loans and investments of **Industrial Development Bank** May 31 were $101,960,115 or 7.5% higher than $94,839,496 a year ago and 0.3% above the $101,582,157 at April 30.

Disbursements during May at $1,722,642 compared with $1,744,541 in corresponding 1959 while repayments of $1,400,483 compared with $1,331,073 in May of last year.

In the first eight months of the bank's fiscal year (which ends Sept. 30) disbursements were $19,148,711 ($18,818,264 in corresponding 1958-59) while repayments were $14,124,196 compared with $12,841,827.

Here is the comparative statement of assets and liabilities:

	1960	
Assets	May 31	April 30
	$	$
Cash on hand and in banks	363,135	14,952
Loans and investments	101,904,316	101,582,157
Property held for sale	283,755	129,057
Guar. & u/w agree.	55,799	55,395
Other assets	1,652,817	1,621,382
Total assets	104,259,822	103,402,943
Liabilities		
Capital paid-up	25,000,000	25,000,000
Reserve fund	12,808,968	12,808,968
Reserve for losses	1,600,000	1,600,000
Bonds and debs. o/s	62,300,000	61,800,000
Liability under guar. & u/w agree.	55,799	55,359
Other liabilities	2,495,055	2,138,580
Total liabilities	104,259,822	103,402,943

"Look what the human voice sold me"

(and I don't even like these foreign cars)

Well, maybe we exaggerate the persuasive powers of radio just a leetle, but . . . consider this: *the oldest and best instrument of communication is the human voice.* Newspapers don't have a voice. Magazines don't have a voice. Billboards don't have a voice. *But radio has a voice.*

A soft, woman's voice, telling other women about a new cosmetic, or refrigerator, or stove . . . *and making them believe it!* And a firm, masculine, man's voice, telling other men how a car hugs corners, or how a shaving cream softens and soaks whiskers, or how a shirt looks . . . *and making them believe it!*

The voice of radio may well be the spark needed to start a fire under your product's sales curve. It's worth looking into. And the easiest way is to contact the Canadian Association of Broadcasters. We represent 162 radio stations. We'll be glad to discuss the ones that can help you best, in the way best suited to your budget.

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C. A. B.

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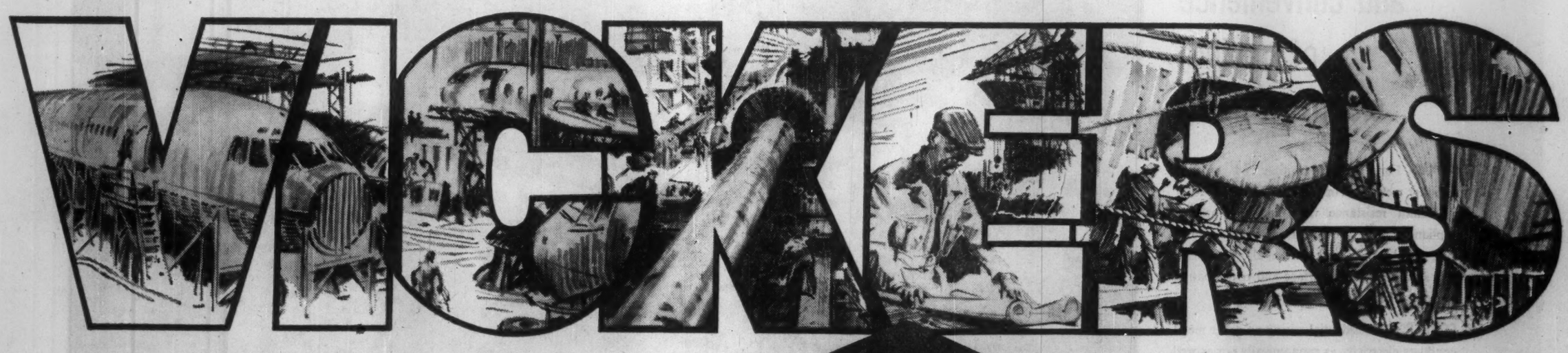
BRITISH EXHIBITION NEW YORK·JUNE 1960



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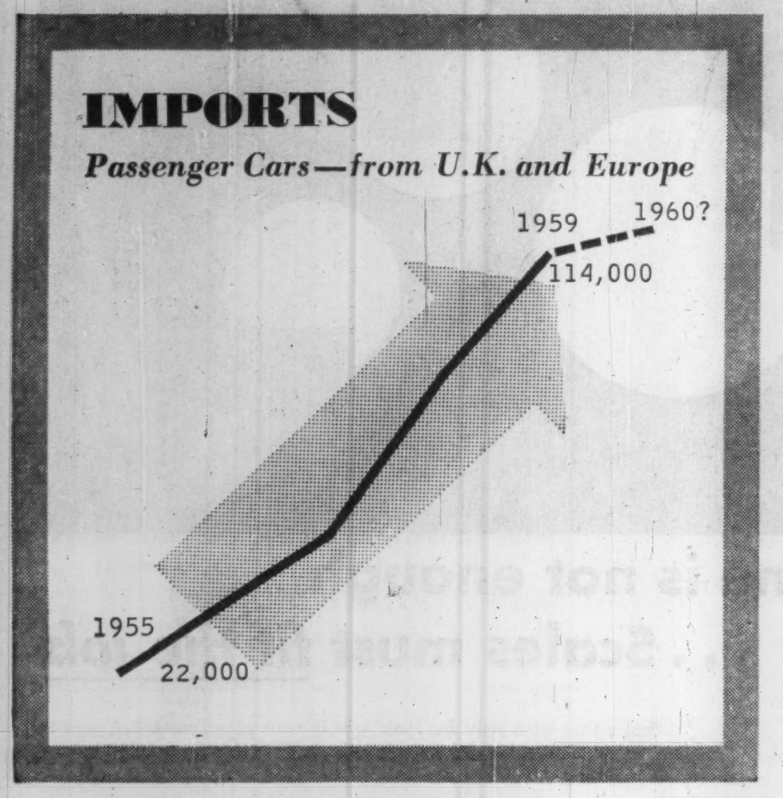
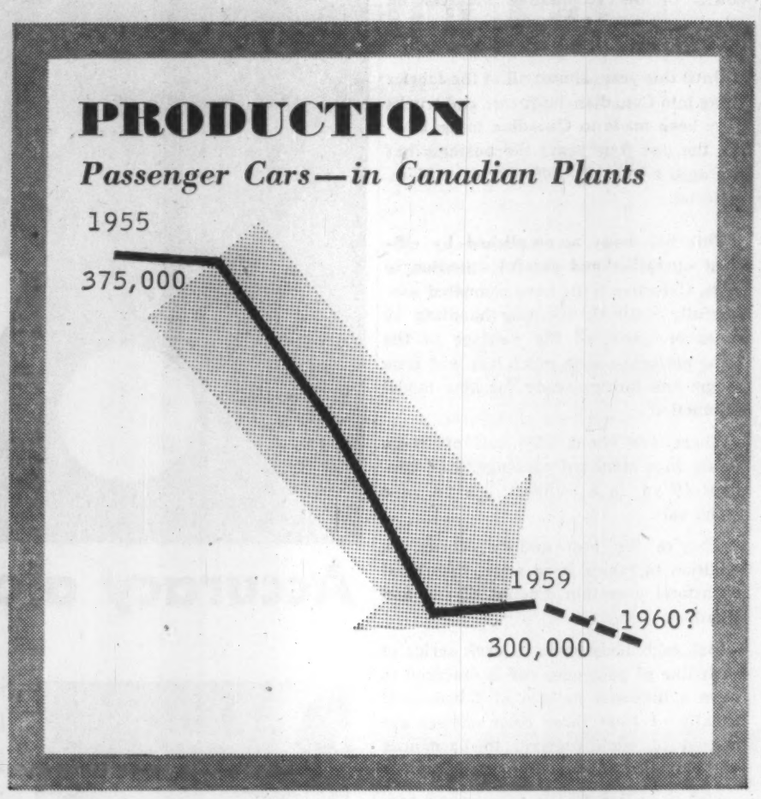
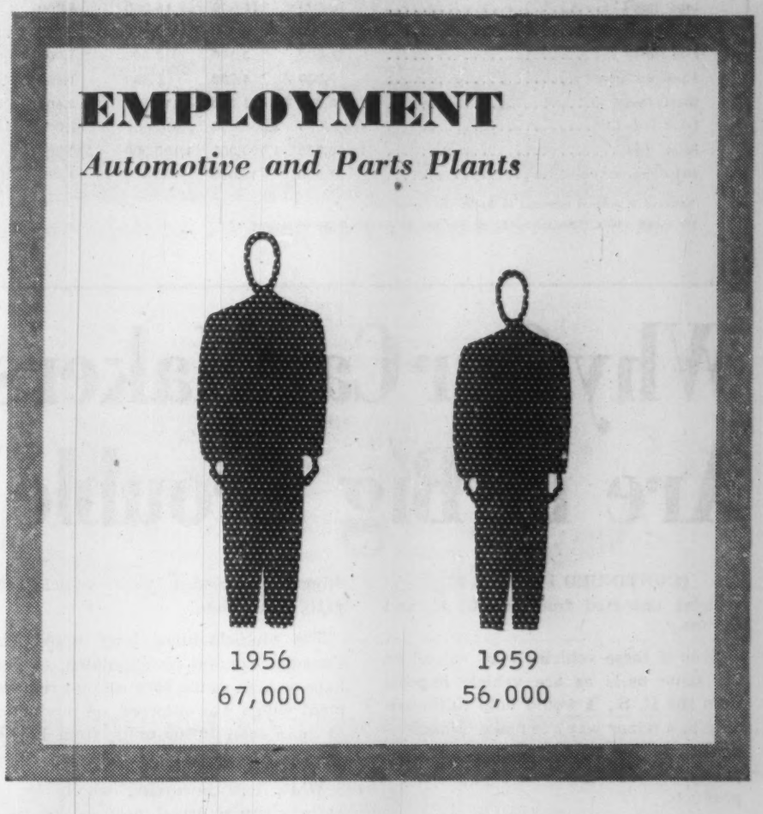






Imports up... Output down... Jobs drop...

That's Why Our Car Makers Are in Trouble

By RALPH YOUNG

The automotive manufacturing and parts industries in Canada are in trouble. They say they need help if they are to continue to operate and provide employment at even the current level.

Production and jobs have been on a steadily declining level during the last four years, as imports have increased.

And the industries claim that they are being forced to operate under tariff and other regulations, basically unchanged for 25 years, which now discriminate sharply against Canadian production and in favor of imports from the U. K. and Europe.

Representations to this effect have been flooding into Ottawa during the last three weeks.

A delegation from five Ontario municipalities directly affected—Oshawa, Windsor, St. Catharines, Oakville and Trafalgar Township—had a two-hour interview with Prime Minister Diefenbaker and members of his cabinet. They considered, in detail, a comprehensive brief prepared by the Windsor Industrial Commission.

Cabinet ministers and senior civil servants have been discussing, with representatives of the Automotive Parts Manufacturers' Association, a brief prepared by that organization.

A committee of the United Automobile Workers expects to meet government officials next week, to present the union's views.

The vehicle manufacturers, through the Canadian Automobile Chamber of Commerce, are hammering out a presentation to be laid before the Prime Minister and his associates.

This is what they are telling the government:

Vehicle and parts manufacturing business is slipping out of Canada at a rate that has become alarming. The effect is spiraling into a situation that already has closed the plant of one major supplier and caused the loss of other jobs to Canadians. Within a few months it could close other plants, throw more people out of work.

This has happened despite intensive efforts on the part of the companies to pare costs, including a definite squeeze on suppliers to obtain parts and components at lowest possible prices.

Here's the picture:

• **Imports from the U. S., U.K. and Europe have tripled since 1955,** and last year they accounted for one third of new passenger car sales. In the first three months of this year, sales of U. K. and European cars in Canada rose by about 25% over the same period in 1959.

• **To meet this competition, Canadian subsidiaries of the U. S. companies brought out compact cars.** But this only added to the multiplicity of models—in a shrinking market. The industry authority, Ward's Automotive Reports, says 211 individually priced models are made in Canada, 129 others are imported from the U. S. and sold in Canada by the five manufacturers.

(Each car line, such as Chevrolet, has two or more price-ranges called series. Each series has six to 10 body styles including station wagons. Each of these is a different model.)

Here is the total number of models produced by each Canadian manufacturer, with models imported from the U. S. and sold in Canada in brackets: **General Motors** 76 (55); **Ford** 72 (19); **Chrysler** 52 (25); **Studebaker-Packard** 11; **American Motors** 30 (all presently imported).

• **Reduced sales of most of these models have resulted in smaller orders for individual parts.** While some parts are common to many models, others have small differences that require different dies and tooling.

As a result, many of these quantities are now so small that parts manufacturers cannot meet tooling and production costs in comparison to the price of imported parts.

Therefore, purchases of parts from U. S. suppliers have been increasing at an alarming rate.

In 1959 imports of auto parts reached the new high of $319,463,731 with 96.4% coming from the U. S. That was a jump of 21% in one year from the 1958 total, $264,774,534, of which the U. S. supplied 96.7%. It is estimated that 60% of the imports entered Canada duty-free.

• **Inevitably, employment** in plants of both the automotive manufacturers and their suppliers of parts and components has been shrinking.

• **Effects are now so serious** that the whole situation could get out of control. When a parts manufacturer cannot compete with U. S. prices, the auto manufacturer invariably wants to buy the part in the U. S. to keep selling price of the car as low as possible.

But major manufacturers now are having difficulty maintaining the 60% Commonwealth content required by government regulations, if they are to import necessary components duty-free.

"Content" is rated on total cars produced by a company. Normally, largest volume cars (usually those in the lower price ranges) have the largest Canadian content because volume enables Canadian parts suppliers to make the components at competitive prices.

But higher-priced, lower-volume cars may carry a small Canadian content. Therefore, to keep the average Canadian content for his whole production above 60%, the manufacturer will cease making certain automobile series in Canada and will import them for his dealers as finished cars.

For instance, all Cadillacs, Lincolns, Imperials, and higher-priced series of several other lines of cars are now imported.

As the "content" squeeze tightens, more series will go off Canadian production lines—and more men in both the auto and parts plants will be laid off, industry officials say.

• **Government action is required,** the industry says. The situation has gone far past the point where the industry's renowned resourcefulness can correct it, the government has been told.

Free entry to U. K. cars and parts was extended by the Bennett government in the depths of the depression—when there was no demand for U. K. cars in Canada and the U. K. auto industry was relatively small.

Now the U. K.—and European—automotive industries are booming and pushing into world markets. The U. K. has the nearest possible condition to full employment—while thousands of Canadian auto workers are idle.

Canada is an "importers' paradise", the auto parts men say.

Low valuations for duty purposes—an average of $797 is the value on which duty and taxes are paid on a Volkswagen, for instance—mean that imports pay much less, proportionately, than the taxes on Canadian-produced cars. U. K. imports are valued at similarly low figures, and pay no duty.

Already there are rumors that two European manufacturers are planning plants in the U. K. to take advantage of the British preferential tariff.

Canadian parts manufacturers have made these points:

▸ **Imports of foreign cars** have not increased the sale of Canadian wheat and other Canadian products to Britain and Europe; sales of wheat have declined while shipments of cars to Canada have risen sharply.

▸ **Sale of British cars** in Canada has not diverted business from U. S. plants, as apparently was the intention of government policy. U. S. cars imported into Canada are almost all higher-priced lines. But the imports have taken business from Canadian manufacturers, and jobs from Canadians at a time of high British and European employment.

What can solve the admittedly pressing problems? In industries as complex as these, no one solution can meet all the needs. But there is unusual unanimity on some points:

• **Unbind the automotive tariff schedules** at the General Agreement on Tariffs and Trade conference this autumn.

Freeing of this item does not change anything in Canada's tariff structure. But it is necessary to have the item unbound to permit the Canadian government to take any action it deems necessary, within the next three years, to assist the industries.

• **Apply more realistic valuations,** for duty purposes, on, particularly, finished

(Continued on page 26)

Parts Employment Sliding Even When Sales Going Up

The automotive parts industry is, to some extent, one of movement. Almost every year, some companies get into the business and others leave it, if only temporarily.

There are two basic reasons for this:

• **It is almost impossible** for a company to generate parts business for itself. It is completely at the mercy of the car and truck manufacturers who, in this country, are captive to U. S. corporations.

The Canadian auto manufacturers must accept designs, and design changes, introduced by their parent companies, because they have to rely on their parent companies for supply of key components. And all the parts of a car or truck have to fit each other.

• **Most companies** that make auto parts can, with the same basic equipment, also make parts for other industries, or in some cases, completed products.

Because of uncertainties in the auto industry, there has been a trend in recent years for parts manufacturers to diversify into other lines.

These factors make it difficult to obtain a precise picture of the parts industry from year to year. Even DBS publishes statistics only on production of metal parts—yet textiles form an important cost item, and plastics in steering wheels and many other forms, are becoming increasingly important.

A survey conducted during the first 10 days of this month, specially for **FP**, covered 67 firms that have been consistently in the auto parts business for the last several years. They are located in 31 towns and cities.

These facts emerged:

These 67 companies in 1953 employed 15,460 persons. Employment had declined gradually, to 13,276 this month. The decrease is 14%.

But this decrease occurred during a period when new motor vehicle sales in Canada had increased from 462,526 to 498,776, a gain of 8%, with a dollar value increase from $1,162 million to $1,532 million, up 24%.

And, in the same period, Canada's population went up from 14,845,000 to 17,732,000, or 16%.

In the same seven-year period, the 67 companies had put more than $23 million into capital improvement and modernization, to keep abreast of the needs of the automotive industry. That increase was equal to 38% of their total capitalization in 1953.

Most of them, it is true, were able to make very little investment in facilities. But a few companies—notably large subsidiaries of U. S. firms—invested heavily. One now has a capitalization 17 times greater. Several others expanded to an extent of 50% to double or triple the 1953 investment.

While much of the money went for more modern production facilities, almost none of it was for "automation" in its generally accepted meaning.

Combined statements of these companies showed that modernization had been responsible for less than 1% of the reduction in employment.

Of the companies responding, 14 said that they have no plans for expansion. Only two reported definite plans for expansion. Two others said that they have plans which are not definite.

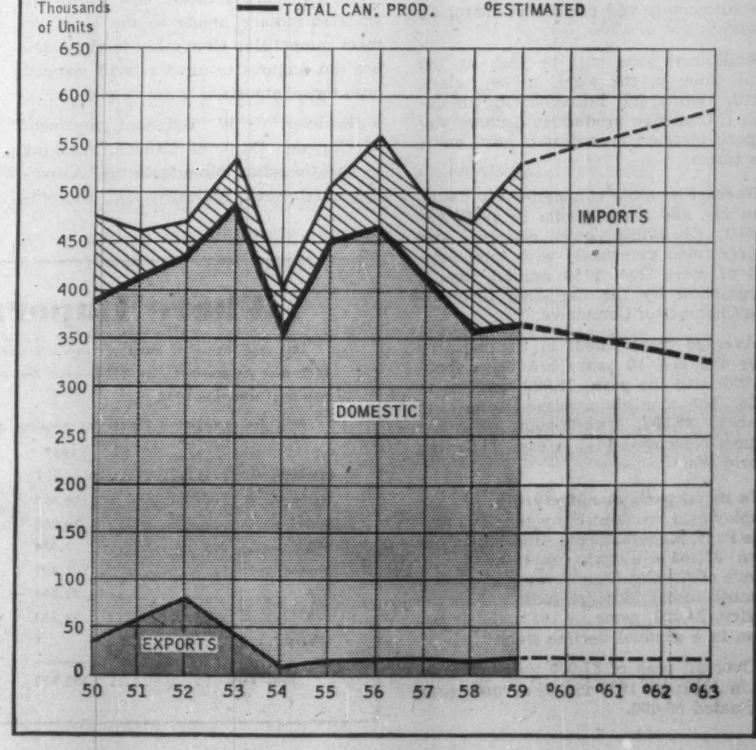
Said one company: "We have double the capacity that we are using now."

Another: "If imports were reduced substantially we could probably increase employment 50%."

Companies reporting are located in these communities:

London, Brantford, Preston, Hamilton, Windsor, Chatham, St. Thomas, St. Catharines, Toronto, Kitchener, Walkerville, Wallaceburg, Welland, Merritton, Ridgetown, Ingersoll, Oakville, Galt, Peterborough, Richmond Hill, Stratford, Amherstburg, Woodstock, Ajax, Burlington, Fergus, Lindsay, Oshawa, Guelph and Dresden, all in Ontario; and St. Lambert, Que.

Canadian Motor Vehicle Sales and Production



Canadian Materials in Cars

Canadian materials used by our automotive industry:

	*Used in 1955 (Production: 453,600 cars, trucks)	Estimated 1959 (Production: 368,000)	†Estimated 1963	†Estimated Loss 1963 vs. 1955
Steel (tons)	240,000	196,000	175,000	65,000
Rubber (tons)	57,000	46,000	41,000	16,000
Lead (tons)	22,000	18,000	16,000	6,000
Copper (tons)	7,000	6,000	5,000	2,000
Zinc (tons)	4,000	3,500	3,000	1,000
Aluminum (tons)	5,000	4,000	3,600	1,400
Glass (tons)	20,000	16,000	14,400	5,600
Textiles (yd.)	4,500,000	3,500,000	3,000,000	1,500,000
Paints (gal.)	1,600,000	1,300,000	1,100,000	500,000
Miscellaneous (tons)	17,000	14,000	12,400	4,600

*Included in material submitted to the Gordon Commission.
†Estimated results, if present trends continue and no changes in import regulations.

Why Our Car Makers Are in Big Trouble

(CONTINUED FROM P. 25)

vehicles imported from the U. K. and Europe.

Even if these vehicles were valued on the same basis as are vehicle imports from the U. S., it would help (although only in a minor way) to make Canadian-produced cars (particularly the compacts) more competitive with European products.

The various other remedies being proposed, find agreement only among certain groups.

One of the most revolutionary, proposed by the automotive parts manufacturers, is that the excise tax on automobiles be related directly to the amount of "Canadian content" in the car, in this manner:

Annual Production	Canadian Content	Amount of Excise Tax
Up to 10,000 cars	Under 45% 45% to 50% 50% & over	15% 7½% 0
10,000 to 30,000	Under 55% 55% to 60% 60% & over	15% 7½% 0
Over 30,000	Under 65% 65% to 70% 70% & over	15% 7½% 0

This proposal differs in some notable respects from current practice. At present, a 7½% excise tax is levied on all cars, domestic and imported.

Also, "content" of finished vehicles produced in Canada now refers to percentage of "Commonwealth" parts and labor in the vehicle, not merely Canadian as the auto parts men suggest.

Manufacturers are now allowed to bring in duty free, parts classed as not made in Canada, when Commonwealth content is not less than 40% for total annual passenger car production of 10,000 units or less; 50% when production is 10,000 to 20,000 units; and 60% when production is more than 20,000 cars.

It is necessary to have "content" provisions of the tariff legislation confined to "Canadian" content rather than "Commonwealth" content, the auto parts men contend, and they are supported at least in part by the five municipalities most directly concerned with vehicle and parts production.

The municipalities' brief urged that Canadian content be stipulated, to perhaps as high as the 65% content requirement which was enforced, on production of more than 10,000 units, from 1938 to 1942.

While not concurring wholly in the parts manufacturers' proposal of tying the excise tax to content, the municipalities asked the government to encourage Canadian manufacture of foreign vehicles by reducing the excise tax proportionately, when Canadian content goes over 50%.

"Content" regulations should be revised to eliminate some costs that manufacturers now are permitted to include, such as interest on capital outlay, and freight and other transit charges on parts imported into Canada. This is a recommendation by the municipalities.

Noting that present government rulings, in effect, allow a 100% foreign car unless the producer can claim at least 40% Canadian content ("most favored nation" tariff is now 17½% on both parts and finished vehicles) the municipalities urge that incentives be provided to encourage use of Canadian-made components such as tires, spark plugs, headlights, wheels, wheel covers, gasoline and radiator caps, steering wheels and other components which can be added easily after the basic car is built.

Another proposal by the cities is that Canadian plants concentrate on making one or two models in quantity for both the U. S. and Canadian markets, and that other models be imported, as a means of reducing costs and therefore prices.

While regarded as an intriguing idea, this suggestion involves favorable consideration by the U. S. government toward importation of Canadian-built autos, and little chance of approval is seen at present.

The parts manufacturers definitely propose tariff increases — and this is where they part company with the other interested parties.

The parts men want a tariff of 17½% on both parts and vehicles from the U. K., and an increase to 25% (from 17½%) on importation from "most favored nation" countries.

Vehicle manufacturers now importing from subsidiary plants in the U. K. to meet competition from other foreign cars, are not anxious to have a tariff slapped onto these imports.

However, R. W. Todgham, president of Chrysler Corp. of Canada, speaking to the Canadian Manufacturers' Association last week, indicated that his company would not be adverse to a tariff on imports.

His company distributes in Canada, the French Simca and Italian Fiat, both of which are dutiable.

With Canadian demand high for certain cars made in the U. K. and Germany, ideal solution is considered by many studying the problem, to be import regulations that would encourage establishments of assembly plants in Canada. Some components could be made in the U. K. and some, inevitably, in Canada, so that this double purpose—considered desirable—would be served:

Encourage sales of U. K. (rather than U. S.) products in Canada, and give employment to Canadians.

To do this, the parts manufacturers say, action on tariffs and import regulations is needed—and quickly.

How Auto Sag Hits Another Big Industry

Typical of the effect of the ups and downs of the automotive industry on other segments of Canada's economy, is the experience of the textile industry.

Until this year, almost all of the fabrics going into Canadian-built cars and trucks have been made in Canadian mills. During the last four years the business has averaged a total of 3,500,000 yd. of 54-in. material.

This has been accomplished by efficient operation and careful attention to costs. Canadian mills have competed successfully with U. S. mills handling 10 times or more, of the yardage of the same patterns—with much less lead time to get the fabrics ready for new model production.

There are about 12½ yd. of 54-in. fabric in a standard passenger car, perhaps 10 yd. in a compact, 2½ yd. in a truck cab.

They're the best quality fabrics. In addition to taking hard wear, they must withstand a certain amount of sun and weather.

But each body style in each series of each line of passenger car is designed to have a different pattern of fabric—and usually at least three color choices are offered in each pattern, to harmonize with exterior color combinations.

The Canadian textile men create considerably more than 200 new patterns each year, each with color choices. Each pattern is a duplicate of one established in the U. S.

About two thirds of the total used in Canada now is coated fabric, such as vinyls.

The Canadian mills have been able to manufacture and break even on, orders of as little as 500 yd. for a pattern and color. In the U. S., the mills demand a minimum of 1,000-yd. orders.

But the multiplicity of models, and shrinking production of some models, has resulted in requests for bids for as little as 50 yd. for some special fabrics such as those used in door panels.

To get back their costs, the mills will have to charge so high a price that the business would go to the bigger producers in the U. S.

The question facing both the hard-pressed textile industry and the equally hard-pressed auto manufacturers today is this:

Will the textile orders be permitted to slip across the border—or will the auto men pay a higher price (to help in maintaining their required Canadian content) —and pass on the added cost in the already high prices of the cars?

25,000 Jobs Gone by '63?

There will be 25,000 jobs lost to Canadians by 1963 if present trends persist in the automobile and parts manufacturing industry.

Additional jobs will be lost, at the same time, in the steel, rubber, glass, textile, paint and miscellaneous industries if Canadian production declines and imports increase, according to parts manufacturers.

Average monthly employment in Canadian car and truck plants in 1959 was 33,000 (including both salaried and hourly rated personnel) with total payroll of more than $150 million, says a compilation by the Canadian Automobile Chamber of Commerce.

Average employment in the industry over the last 10 years has been about 31,300 with the peak, 35,099, reached in 1956. The monthly average dropped in 1958 to 26,397, lowest point since the industry recovered its steam following World War I.

In metal parts manufacturing, average employment, computed by the Automotive Parts Manufacturing Association, has been 31,181 — almost equal to that in plants of the five Canadian car and truck manufacturers. But the peak in that industry, 35,003, came in 1953, and it has been in a gradual decline since.

Over-all peak of 67,000 was established in 1953; by 1959 it had shrunk to an estimated 56,000.

Where Imports Come From

Last year imports of passenger cars into Canada set a new record with a jump of 49,737 or 47% over the previous year, 1958, which was a record up to that time. The increase was greater than total imports in 1955.

Here are comparative figures for principal countries of origin:

	1959	1958	1957	1956	1955
Czechoslovakia	377	304	23	3	7
France	16,385	7,186	180	25	7
Germany	36,060	29,283	24,319	16,614	6,110
Italy	2,274	1,720	5	4	7
Sweden	1,305	449	27	...	...
U. K.	72,997	47,489	28,867	20,733	15,018
U. S.	24,533	17,761	17,374	38,799	27,392
Others	1	3	1	22	5
Total cars	153,932	104,195	70,796	76,200	48,546

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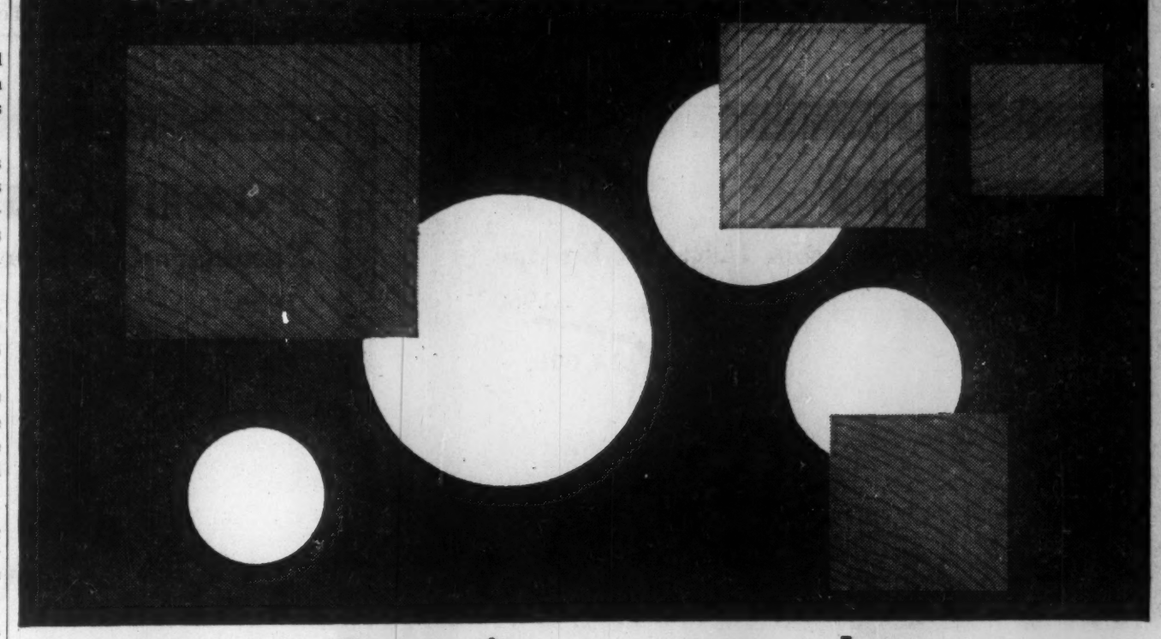

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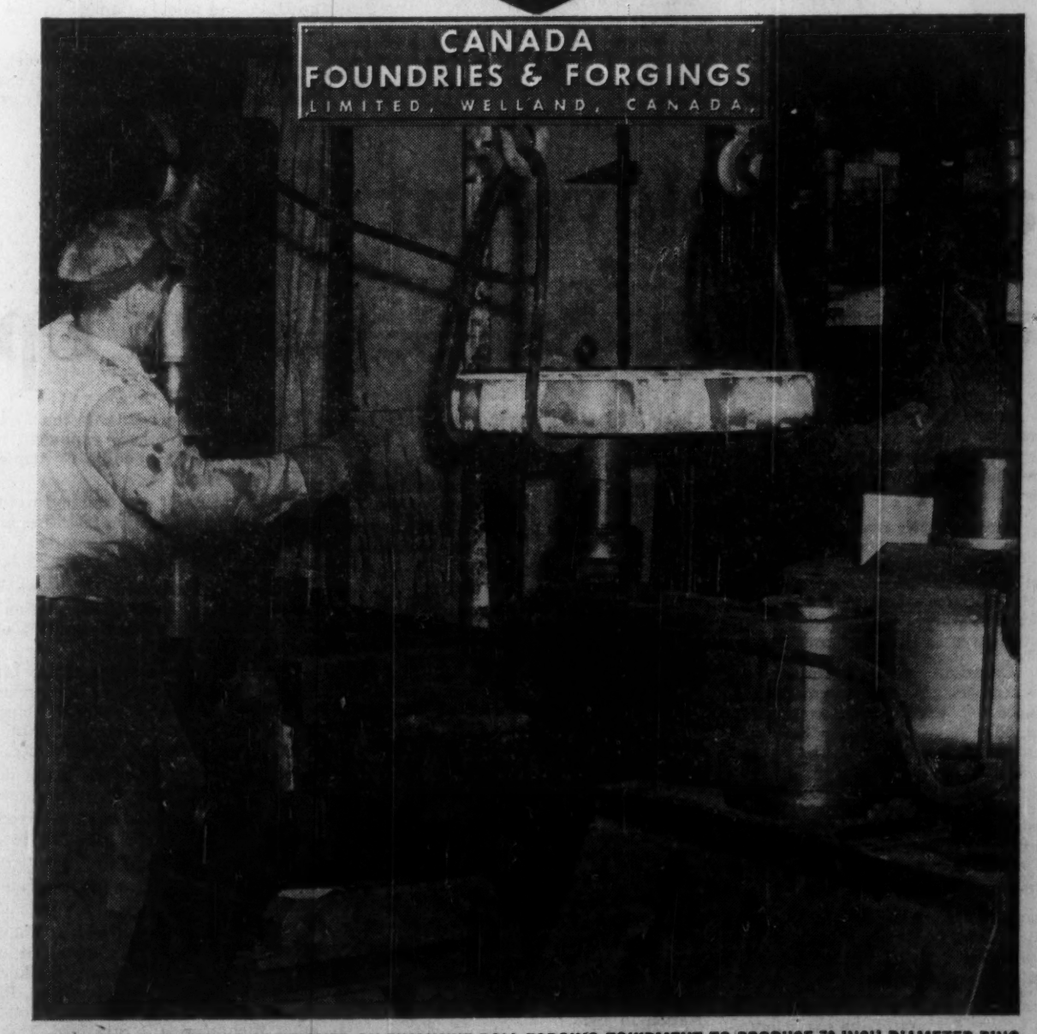

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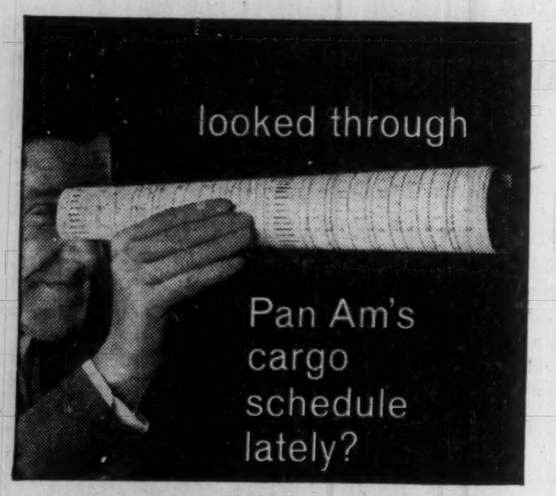
MANITOBA ATLAS
From Our Own Correspondent

WINNIPEG — A new economic Atlas with 100 maps and 40 pages of text is the latest project of the provincial Industry and Commerce Department to tell the world about Manitoba. Directed by Prof. T. R. Weir of the University of Manitoba geography department, the book tries to tell what industry and investment interests need to know about the Keystone province. Cost per copy when it comes off the press about the end of June, $15.

ANNOUNCEMENT

DONALD F. WEEKES JAMES SIM

George A. Elliott, Vice President and General Manager of Robertshaw-Fulton Controls (Canada) Limited, announces the appointment of Donald F. Weekes as Chief Engineer and James Sim as Operations Manager.
Mr. Weekes has been Operations Manager since 1956 and Staff Assistant to the General Manager since January, 1959.
Mr. Sim has been Tool Room Supervisor since 1957.



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YOUR TAXES

An exclusive FP column of comment on the trends in personal and business taxation

Plan to Hire Relatives? Make Sure They Earn Pay

By JOHN G. McDONALD, LL.M.
McCarthy & McCarthy, Toronto

TWO RECENT Canadian tax cases feature the subject of "family income splitting", which has always attracted official attention and is dealt with by several special sections of the Income Tax Act.

Years ago an irate husband decided to hire his wife for the purpose of reducing his own income tax liability (at high rates) in exchange for the lower tax payable by his wife.

It didn't take the government long to plug that loophole, and today the Act provides that "where a person has received remuneration as an employee of his spouse, the amount thereof shall not be deducted in computing the spouse's income and shall not be included in computing the employee's income".

This rule applies even if you are a consulting metallurgist and your wife is a Ph.D. in chemistry working full-time in your office. You are still officially a tax-dodger and must pay tax on your wife's salary as if it were your own.

The rule also applies proportionately if you are a member of a partnership that hires your wife — and if she is taken into the partnership herself, **all** of her income may be taxed to you if the Departmental assessor so directs.

Different Rule For Children

If you hire your grandmother, on the other hand — and let us assume that she also is a Ph.D. in chemistry — you may deduct her salary in computing your own income for tax purposes **unless** the salary to her is not "reasonable in the circumstances".

For example, if grandma is home in a wheelchair confined to TV and knitting, your deduction is disallowed.

In more practical terms, the statutory provision is used to prevent excessive expense deductions of any kind, such as traveling allowances. In **No. 589 vs. Minister of National Revenue,** the most recent case, an expense claim was disallowed in part because it involved $20,000 for travel and entertainment which included the cost of operating two Cadillacs and "$1,000 for beverages and cigars".

But if your child or other relative actually works for you, there is no restriction placed upon the deduction to you of salary paid unless it is excessive in amount.

This question arose last month in **No. 712 vs. Minister of National Revenue,** in which the Crown challenged the deduction of salary paid to the 18-year-old son of a company's president.

The salary amounts paid were $7,050 in 1955 and $10,000 in 1956. The assessors in charge of the case thought that $2,000 and $3,000 for these years would have been "reasonable in the circumstances", and disallowed the balance.

They also taxed this balance of $5,050 and $7,000 to the president's son as investment income, under s. 32(6) of the Act.

At the trial, it was established that the president's son was a brilliant engineering student at the University of Toronto, and that he not only took over top management of his father's company while still in school — he also brought about a substantial increase in the company's sales.

The Tax Appeal Board found no difficulty in allowing the appeal.

This case, incidentally, makes good reading to anyone interested in Canadian immigrant sociology. The president of taxpayer No. 712 arrived in Canada in 1939 with $3 cash, his wife, and the son (aged 4 years) involved in this appeal. He spoke no English.

In 1956, his family business, run with his son's valuable help, was a "nationally-known paint manufacturing concern, whose sales were [over] $1 million".

Paying Children By I.O.U.

The other current case to which we refer is **Brochu vs. Minister of National Revenue,** in which a merchant/farmer "paid" four of his children (age 16-21), as employees, certain amounts evidenced by demand promissory notes.

None of the notes had been paid (1960) although they were issued back in 1956 and 1957.

The Tax Appeal Board disallowed the deduction of the wages in question to **Brochu** for the rather obscure reason that issuing a note does not constitute payment.

As a matter of law, the taxpayer should have been allowed the deduction if he reported income on an "accrual" basis (that is — accounts **receivable** are income, and accounts **payable** are deductible).

The point the Board missed — which was the real question involved — was the rule of s. 12(3) of the Income Tax Act that:

"In computing a taxpayer's income for a taxation year, no deduction shall be made in respect of an otherwise deductible outlay or expense payable by the taxpayer to a person with whom he was not dealing at arm's length if the amount thereof has not been paid before the day one year after the end of the taxation year . . ."

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BREITHAUPT, MILSOM APPOINTMENT

DONALD A. BYERS
Donald A. Byers has been appointed to the Creative Department of Breithaupt, Milsom Limited.
Mr. Byers has had extensive experience in the practical application of creative ideas in the field of advertising, merchandising and sales training programs. Immediately prior to joining Breithaupt, Milsom, he was with The Goodyear Tire & Rubber Company of Canada where, as Manager of Sales Training, he was responsible for the creation and presentation of training clinics, dealer meetings and sales conferences.
A short story writer, Mr. Byers is well known for his Christmas stories which have become an annual reading tradition in many Canadian homes.

Productivity...

It includes all factors relating to output. Here is up-to-date thinking as presented at the Canadian Manufacturers' Association convention ...

DR. JULES BACKMAN, Professor of Economics, School of Commerce, Accounts and Finance, New York University, New York.

Productivity reflects the relationship between all the inputs of factors of production and the resulting output. Production requires capital investment, raw materials, managerial know-how and labor.

We have not been able to measure the separate contribution of each of these factors to the resulting output.

Usually, input has been represented either by manhours or by the number of workers since it is relatively easier to obtain these data. The resulting figure is called "output per manhour" or "output per worker."

These latter estimates are much narrower in scope than productivity. **It should be emphasized that the use of these more limited measures does not mean that labor is solely responsible for the gains in output per manhour.**

How is the aggregate output in physical terms to be measured for an electrical equipment company?

Today's output of appliances is only remotely related to the output of, say, 10, 20, or 30 years ago.

The refrigerators, dishwashers, washing machines, turbines, and other products have little in common with their forebears except their functional usefulness.

And what about the new products which were not available 30 years ago: electric blankets, television sets, garbage disposal units, etc.?

How do we combine the new and the old? When we obtain the dollar totals for the industry, what price index shall we use to reduce them to physical quantities?

This illustration indicates not only the problem of measurement of national changes in productivity but also why it has been difficult if not impossible to obtain estimates of output per manhour or productivity for such industries as automobiles, machinery, electrical equipment, and many others.

Efforts are now being made to measure capital input in the United States. But I know of no progress in this area in Canada. And there is still no way to measure the contributions of management.

It should be noted that even the labor input data are not very satisfactory. In none of the Canadian data is allowance made for differing skills; all workers ranging from the janitor to the president are given equal weight.

Many persons use the terms output per manhour and productivity interchangeably and imply that gains in output per manhour are due solely to labor. Certainly, more skilled workers are required to handle today's equipment.

New capital investment undoubtedly is the major factor which contributes to increases in productivity. This is shown by the fact that the major gains have developed in industries which utilize large amounts of capital equipment.

Management also makes a significant contribution. Thus, for example, by changes in plant layout and production techniques, it is often possible to increase output without radically changing either the number of workers or their required skills, or the types of machines used.

The gains of productivity may be distributed among four groups:

1. Workers may participate by receiving higher wages and non-wage benefits, more leisure time, and lower prices.
2. Consumers may participate by paying lower prices.
3. Investors earn higher profits and receive greater dividends.
4. Government shares in the gains in productivity through tax collections.

Another question that is often debated is whether it is better to raise wages or to cut prices when distributing gains in productivity. I favor cutting prices. If some prices are reduced, or if they rise to a lesser degree than does the general price level in a period of inflation, a larger number of units may be sold.

Unless more units are sold, the increase in productivity will be accompanied by layoffs. It would take fewer men to produce the same quantity of goods. The result is usually described as technological unemployment.

Year to year changes in output per manhour or output per worker are highly irregular and are influenced to a major degree by cyclical changes in the volume of output. Thus short-term changes in output per manhour do not provide a meaningful test as to the adequacy of annual adjustments in wages and non-wage benefits.

When longer term comparisons are made, it is important to make sure that the beginning and terminal years are at similar stages of the business cycle.

If this is not done, the long term rate of gain is distorted.

For this purpose trends established over periods of twenty to forty years or more should be used.

It is also important to use **total labor costs** when considering relationships to changes in output per manhour.

The use of national data for output per manhour provides only an indication of the **central tendency** for increases in real wages rather than an unvarying total that must be met by each and every company.

HARRY TAYLOR, Vice-President, Industrial Relations Union Carbide Canada Ltd., Toronto.

A company's ability to pay higher wages, both direct and indirect, is determined on its profitability and not on national productivity patterns.

A national index, whatever it is called, that is based on the ratio of total man-hours to total selling prices must include a number of assumptions.

It assumes, for example, that the ratio of man-hours to selling prices is the same for producing neckties as it is for automobiles.

This may be completely out of step with the actual experience of individual companies which is the level at which collective bargaining usually takes place in Canada.

Most of you will remember the statutory requirement to pay a cost-of-living bonus during World War II. The bonus was based on the then national cost-of-living index and applied across Canada.

As a member of the board charged with the administration of this statute I had an opportunity of examining it at close range. It became abundantly clear that this provision was creating such pressures against prices that it was necessary to abandon it or be exposed to a higher level of inflation by permitting more increases in prices.

In other words the wartime cost-of-living bonus or escalation as it is called today, when dealt with on a uniform national basis and related to a national index, was found to be unworkable in the national interest.

I suspect a similar situation would result if all wages were determined on a uniform national index basis whether the index is the consumer price index, a productivity index, or both.

What is the role of productivity in collective bargaining?

I should answer that by saying this: Because available data at the present time is national in character, because indices are at present based on limited in-put factors and a number of assumptions, because of risks involved, because of difficulty in getting agreement on suitable indices and for a number of other related reasons, I do not consider that productivity has had a direct and substantial bearing on the collective bargaining process.

Nor do I see that it will have in the immediate future.

I believe it is unlikely in the immediate future that a statistical device will replace the give and take of the collective bargaining process.

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As a worldwide organization specializing in design, engineering, procurement and construction of plants involving complex chemical processes, Kellogg brings a wealth of technical experience and engineering know-how to the Canadian scene for the development of new projects and processes.

The new HyL process, which could make use of two of Canada's richest resources—natural gas from Alberta and the iron ore reserves of Western Ontario—is fraught with possibilities for the future of Canadian industry and the Canadian economy. If you would like further information, a booklet explaining the new HyL process in more detail is available.

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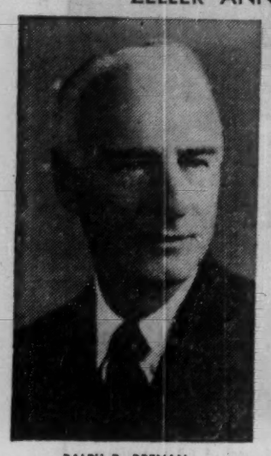

RALPH B. BRENAN

E. LEONARD BOULTBEE

At a Special General Meeting of the Common Shareholders of Zeller's Limited, held May 5, 1960, the size of the Company's Board of Directors was increased from nine to eleven, and Messrs. E. Leonard Boultbee, of Vancouver, B.C., and Ralph B. Brenan, of Saint John, N.B., were elected as additional directors.

Mr. Boultbee is President of Boultbee, Sweet & Co. Limited; Director of Eagle Crest Estates Limited, and Past President of the Vancouver Real Estate Board.

Mr. Brenan is the President and Managing Director of G. E. Barbour Company Limited; Vice-President and Director of Admiral Beatty Hotel Co. Limited; a Director of the Bank of Montreal, Fundy Broadcasting Co. Limited, Crush International, and Director and Member of the Executive Committee of Fraser Companies Limited.

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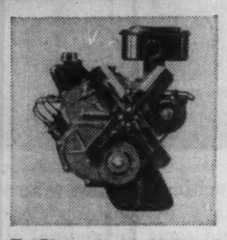

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A Look at Productivity

DR. R. V. YOHE, President, B. F. Goodrich Canada Ltd., Kitchener.

Productivity is a management function and it also follows that increased productivity is no less the direct responsibility of the top management.

All too often, I believe, we look to labor forbearance in demands as a means whereby increased productivity becomes possible or guaranteed.

Actually management astuteness in labor negotiations determines whether or not complete productivity improvement may be obtained from modernization designed to achieve this desired result.

Installation of labor or other cost reduction methods and equipment designed to increase productivity may be wasted effort if the value is lost at the negotiation table.

Here again it is evident that top management's role is paramount both in the decision to install new methods and equipment and also in the degree to which the benefits of such installations are frittered away or not in day by day decisions whether to labor or to other cost erosion circumstances.

It is not my intention to further burden that already overworked fraternity of company presidents but I can only conclude that top management must take the blame as well as accept the accolades for productivity as the case may be.

Increased productivity is strictly a responsibility by and through top management and therefore top management should be held accountable.

* * *

DR. EWAN S. CLAGUE, Commissioner of Labor Statistics, Department of Labor, Washington.

Does rising productivity create unemployment?

The general answer to this question is: Yes and No.

For a given individual or group of workers, the answer is Yes. The introduction of some new machine or process may eliminate a score of jobs, and those individuals may be laid off as a result. It surely could then be said that the mechanization was the immediate or direct cause of their subsequent unemployment.

On the other hand, for the economy as a whole, the answer is substantially No. Lower prices for a product may result in more sales and stability or even expansion of employment in a given industry.

Occasionally, there could be such a marked advance in labor-saving devices that employment in the industry would shrink even though a substantial expansion in production was achieved. However, an expanding industry often generates new jobs, either within itself or in other industries.

Technological advance, which is reflected in productivity gains, has in the past resulted in the growth of such industries as automobiles, chemicals, electronics, and others.

For the economy as a whole, the relationship of productivity and unemployment is in turn related to economic growth. **In an expanding economy, increased productivity will not result in general unemployment.** If output of goods and services lags behind the increases in productivity and the labor force, unemployment can result.

Unemployment in a specific firm often does not result directly from productivity gains in that firm. The Bureau of Labor Statistics has conducted during recent years a series of studies on the introduction of automation in a given plant or office. In these cases, scarcely any layoffs occurred.

In most cases, no employees lost their jobs. This is not surprising. The concern which successfully introduces new devices usually has an expanding market and the devices make it possible to do additional work.

On the other hand, **unemployment that might be said to result from automation will occur in other firms in the industry and, more specifically, among firms which did not automate.** If the automation is successful, and costs are lowered, the less progressive concerns operating with old methods (which may mean considerable use of labor) will find themselves unable to compete. They may shut down entirely and throw many hundreds out of work, but the connection with automation is remote and indirect.

A further complication is that unemployment attributable to productivity gains cannot be distinguished from unemployment due to other factors. In the example cited above, why did the un-automated concern fail?

Perhaps it was more directly due to lack of capital — they didn't have the reserves to buy the automated equipment. Or perhaps it was due to poor management — the concern never was very successful; the extra competition of the progressive concern finally tipped the balance.

In a complex economy such as ours there are many causes of unemployment — direct and indirect, immediate and remote. Usually, these causes cannot be disentangled and they can seldom be quantified.

The question really has to be stated another way — what do we, as a community or as a nation, plan to do about unemployment? It makes little difference to the unemployed worker whether his lay-off was due to the machine or due to bad management of his employer.

In a progressive, changing economy many industries, firms, occupations and jobs will become obsolete while new ones are rising.

In a general way, it can be said that the more rapidly the economy changes the faster it grows. Yet each of these changes can produce unemployment.

The answer is not to prevent the changes but to deal effectively with their results.

DR. DAVID McCORD WRIGHT, Professor of Economics, McGill University.

You cannot assume that if a business is working smoothly it is necessarily working well.

Constant re-combination of factors, which is the real source of productivity, means constant changes of routine, and this involves numerous psychological frictions, which are inevitable if we want growth.

Increased "productivity" is not something we can automatically credit to some one single force — say "labor" or "capital" or "management". Any one or all of them may be responsible.

It is true that at the beginning of the labor movement, in the industrial revolution, reduced hours and better living standards often turned out to enable men to produce more rather than less total product, **and this picture still colors our understanding.**

But we have seen that it is a very one-sided one and the problem of shares is much more complicated than usually thought.

Machinery that raises productivity will usually require differently skilled labor, it is true. But whether it will always require labor that is more skilled is highly doubtful.

In fact frequently the only real contribution made by labor to the increased productivity may simply be the contribution of not vetoing the change.

The theoretical ideal is that the increased revenue produced by the increased productivity should go to the factor responsible for the gain.

Thus, if the gain is really more the work of the new type machine, there should be an increase in capital's income. Ditto management. Ditto labor.

I submit that what we are seeing today may be a considerable exploitation of capital by labor. Capital's share is barely being maintained, if it is, by the ingenuity of management in finding more and more ways of using complicated additions to capital.

In other words, the constant pressure of higher money wages upon the price level is being contained, to the extent that it is, by a speeded up introduction of labor saving devices. It is capital's productivity that is really rising.

The motive power for investment and industrial activity generally is the hope of profit or perspective of profit. Now this explains how too rapid a rate of increase in money wages can cause unemployment even when there is an accompanying inflation. For the inflation may not be enough to offset the increased risk and uncertainty.

"Demand for commodities is still not (necessarily) demand for labor", as even Lord Keynes once noted.

Inflation may clear the shelves, but, if profit prospects are not adequate, employment to replace or to expand may not occur.

Thus in the real world we can find not merely unemployment or inflation but unemployment and inflation.

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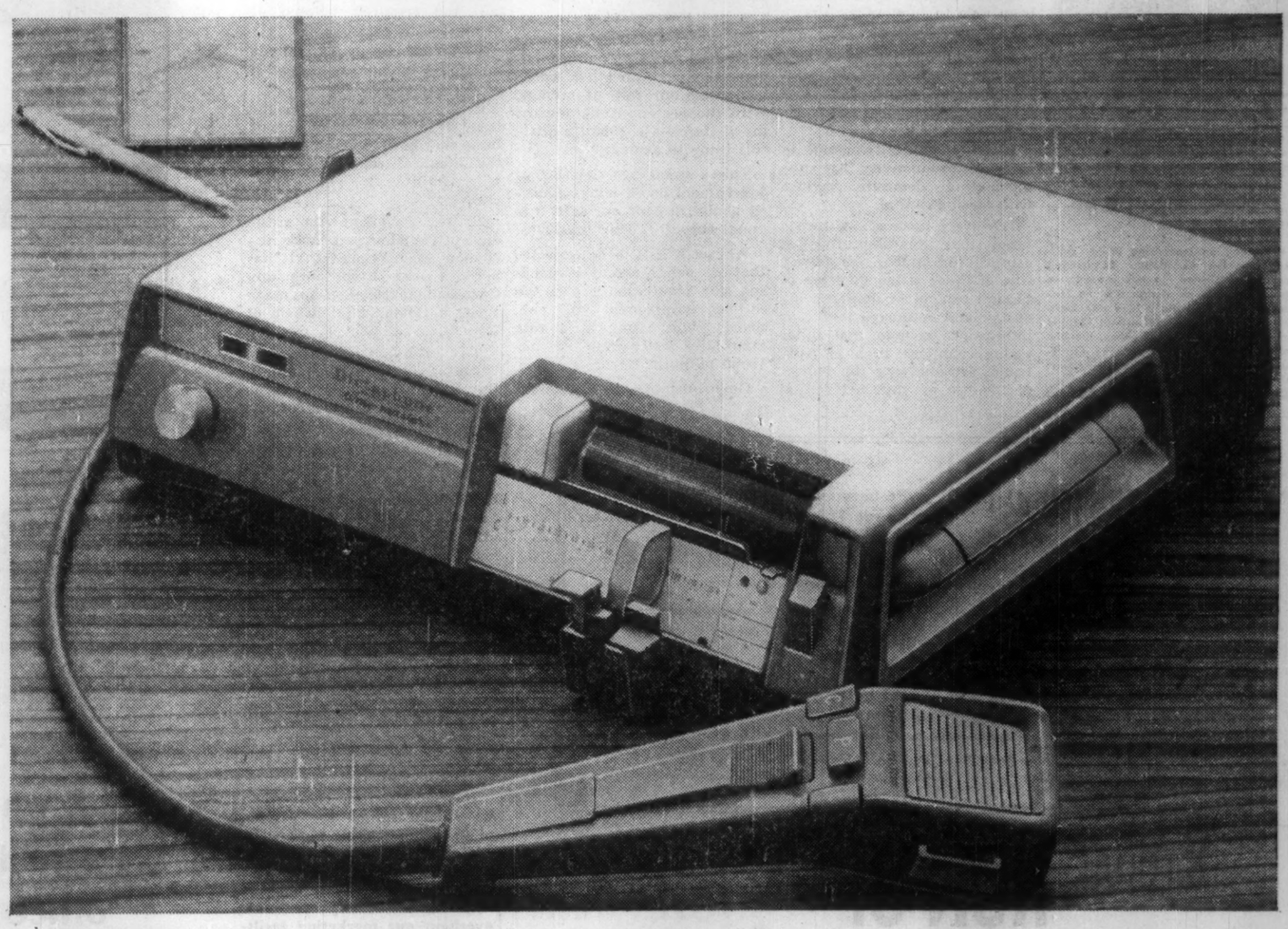

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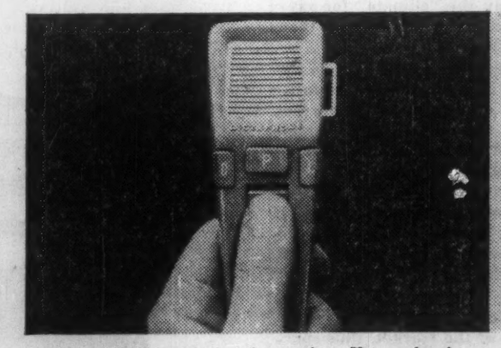

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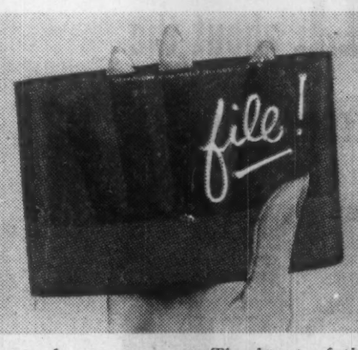

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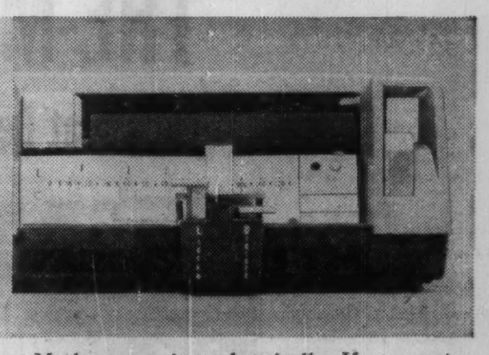

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SICKS' BREWERY LIMITED

W. L. SHORTREED

Mr. N. A. MacPhee, President of Sicks' Breweries Limited, announces the appointment of W. L. Shortreed as Vice-President and a Director of the Company.

Mr. Shortreed has also been elected to the Executive Committee.

ANNOUNCEMENT

J. TERENCE GREGG

Carson F. Morrison, President of Morrison, Hershfield, Millman and Huggins, Limited, Consulting Engineers, announces the appointment of J. Terence Gregg, B.Sc., P.Eng., M.E.I.C., as Chief Engineer and a Director of the Company. After graduating from Queen's University, Belfast, Ireland, in 1949, Mr. Gregg came to Canada and was employed first by the Hydro-Electric Power Commission of Ontario and later by the Department of Highways of Ontario.

For the past six years he has held the position of Supervising Bridge Engineer for the Foundation Engineering Corporation Limited. In this capacity he was responsible for design work in connection with numerous bridge and highway projects in the Province of Ontario including the Burlington Skyway, the Don Valley Parkway, the Rainy Lake Causeway and most recently, the new Homer Bridge at St. Catharines.

INVESTMENT DEALERS

Says Short Run Solutions Create More Problems Than They Solve

Canada's top investment men meet this week at Murray Bay, Que., to exchange views on their work of servicing investors.

Norman J. Alexander, retiring president of the IDA (and general manager of James Richardson & Sons) reviewed current trends in our economy and commented on the problems immediately ahead.

Here are excerpts from his report:

By NORMAN J. ALEXANDER
James Richardson & Sons, Winnipeg.

Throughout the world the postwar period has been one of rising prices promoted largely by a varying degree of inflation, but the experts are almost unanimous in the opinion that today the inflationary trend is over for the foreseeable future.

Even during the recent upturn in business activity in most western democracies, the index of prices of raw materials has remained almost constant while prices of many foodstuffs have fallen.

Despite the fact that Canada is saving at a rate that is higher than most other countries in the western world, we have not been able to finance our entire capital growth ourselves.

This condition is not a new one for Canada, nor for that matter for other relatively highly developed younger nations.

It is economically sound to increase productivity by supplementing domestic savings with foreign capital.

However, it must be recognized that the importing of capital introduces problems. One of these is the question of foreign control of domestic industry and resources and it is interesting to note that other young countries, such as Australia, are studying the impact of the use of imported capital and the advantages of home ownership of industry to as large an extent as possible.

Canada's economic development could not have proceeded at such a rapid pace without the injection of foreign capital.

Imported capital will undoubtedly continue to be an important factor in our future growth but it should be our aim to provide a growing proportion of our capital needs ourselves. Of course, the ideal position would be for us to provide all our own capital and to become a creditor nation. Such a condition, however, is still years away.

Canada's present debt position is sound.

On a per capita basis, our federal debt has been declining consistently for years. The actual figure of Canada's direct debt at the end of 1959 was $700 million lower than at the end of 1945 and, during this period, our population has increased by 40% and our GNP nearly tripled.

While our external debt has grown rapidly, consolation can be taken in the fact that the net cost of servicing this external debt in relation to our GNP is declining. In 1959, it was just under 1½%.

However, we must endeavor to finance more of our growth domestically — in other words —increase our rate of savings. With the present trend toward the welfare state, this is a difficult thing to achieve.

Thirty years ago the cost of government at all levels equaled about 10% of our total national output. Today it is 30%.

Although it is to be expected that as our economy expands and our population grows the cost of government will rise, clearly it is rising at a rate materially faster than our national output.

Governments have brought about a substantial redistribution of income through taxation in order to provide maximum levels of income and support to all citizens.

This practice has the effect of increasing consumption and reducing savings. Increased social benefits means increased taxation. Increased taxation means the individual has less money to save and invest.

A high rate of expansion requires massive application of capital which, as I have noted, should preferably come from domestic sources.

In a country like Canada this means a higher rate of saving and a lower rate of consumption than we have been experiencing.

On the assumption that a reduction in the rate of capital expansion would be undesirable and retrogressive we must encourage increased saving.

How may we promote increased personal saving?

Obviously since saving is postponed consumption savers must be adequately rewarded.

To attract buyers of fixed income securities we should have a stable price level and an interest return adequate to obtain the required volume of savings.

To attract equity capital we must have the quality of growth in the economy.

Granted these conditions the answer to my question seems to be that both government and the financial community have responsibilities for encouraging saving.

As to government—the president of the Montreal Stock Exchange recently stated, "It has been a long time since any Canadian Government has made thrift a fundamental article of faith."

Tax or other concessions to encourage savings need not in the long run damage government revenues because of the gradually increasing tax base.

Probably the achievement of greater industrial efficiency and diversification is the greatest individual challenge that faces Canada. We must accept it. Admittedly there are problems — not the least of which is developing a relatively small home market for secondary industry without hampering our export trade by tampering with tariffs.

The immediate task facing us is to keep our costs competitive, to redouble our sales efforts and to provide our exporters with credit facilities comparable to those available to exporters in competing nations.

Has not the time come when we should follow the pattern of the older trading nations by adding foreign mercantile banking operations on wide scale to our present excellent banking facilities? Certainly we could overhaul our marketing facilities and techniques, including arrangements for granting long-term credits to foreign buyers.

Today the "climate" for saving and investing is better than a year ago.

Investors have more confidence in the dollar as a storehouse of value; interest rates are at attractive levels — high enough to encourage bond buying but not too burdensome for borrowers.

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The premium on our dollar has lessened through the mechanism of the market, thus sparing us the penalties attendant upon direct intervention by government.

There are, however, two imponderables facing us which will affect the course of securities prices: our ability to win and hold larger export markets and the unemployment situation.

Let us avoid, at all costs, short run solutions such as artificially low interest rates or inflationary increases in the money supply which create more problems than they solve.

PROVINCIAL EMPLOYEES

From Our Own Correspondent

FREDERICTON — W. F. Billyard, Winnipeg, has been re-elected president of the Canadian Council of the Provincial Employee Association. Other members of the national executive are John Toner, Fredericton, vice-president, and Roy A. Harrison, Edmonton, secretary - treasurer. Toronto was chosen site of the 1961 annual meeting next April or May.

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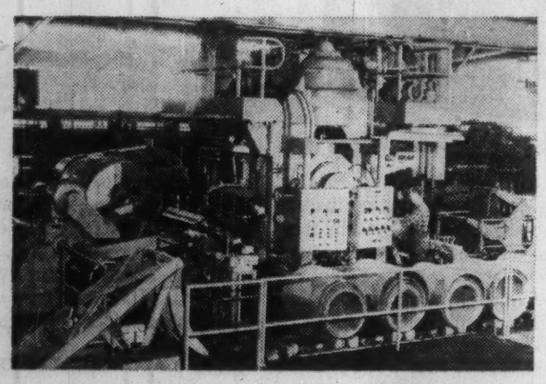

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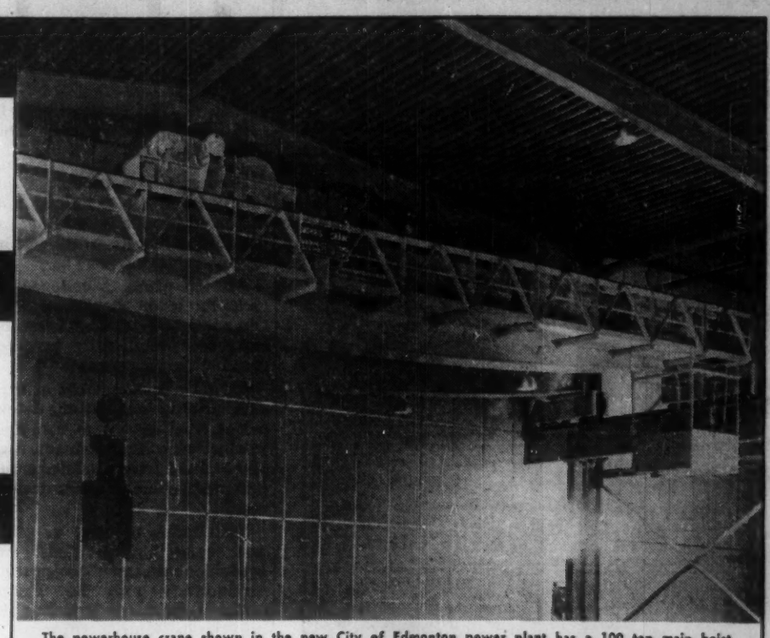

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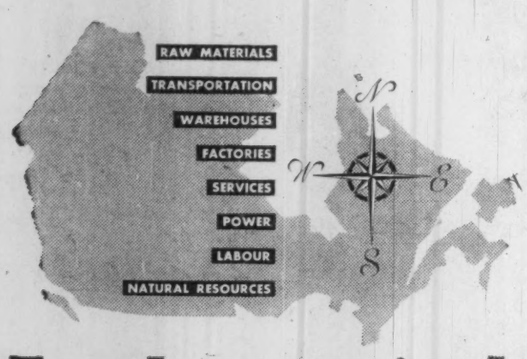

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DEPARTMENT OF INDUSTRIAL DEVELOPMENT

Natural Gas Reserve Picture is Significant

Proven reserves of natural gas are rising rapidly, but to be realistic about the Canadian natural gas transmission business, it must be recognized that it is still in its very early growth years.

If the industry is to expand, J. W. Kerr, president of Trans-Canada Pipe Lines Ltd., told Canada's Investment Dealers, it is very important that government regulation should not be restrictive.

Here are excerpts from his speech:

By J. W. KERR, president, Trans-Canada Pipe Lines Ltd.

During 1954 when **Trans-Canada,** and the other main Canadian gas transmission system, the **Westcoast Transmission Co.** were in the formative stage, the reserves of natural gas in Alberta were estimated to be 13.4 trillion cu. ft.

Two years later, in 1956, these Alberta reserves had been increased by 35% as a result of new discoveries.

By 1958 they had been increased 50% above the 1954 level, and right now these proven reserves are at least 27 trillion cu. ft., more than double the volume established in 1954.

When we add proven reserves of British Columbia, Saskatchewan and Ontario to the Alberta figure, we get a total proven reserve of more than 30 trillion cu. ft.

This natural gas reserve picture is significant in many ways. In the first place, the future of our domestic and American export business exists because this is already a very abundant reserve, and secondly the rate of new discoveries is realistically expected to be at least 2 trillion cu. ft. per year

By 1989, it is forecast that Canada will have a reserve of 92 trillion cu. ft., three times the present volume.

This is probably a very conservative estimate because the Canadian Petroleum Association, backed up by competent geology, estimate the reserves will total 300 trillion cu. ft. by 1989.

It is reassuring, however, that the National Energy Board recently confirmed their belief that the reserve 30 years from now will be at least 92 trillion cu. ft.

The Energy Board believes that Canada will require 21 trillion of the 30 trillion cu. ft. of presently established reserves. This leaves a surplus of just over 8 trillion cu. ft. will be required to back up the presently approved American export contracts.

After adding the 21 for domestic use, and the eight for export, and deducting the total of 29 from the reserve of 30 trillion ft., we find that right now this is one trillion cu. ft. surplus to all known requirements.

This surplus by itself is a tremendous volume of energy, but 30 years from now this surplus is estimated to be 46 trillion cu. ft. because of the rapid new discovery rate that is expected each year through 1989.

As a point of interest, we in Trans-Canada now have about eight trillion cu. ft. of gas under contract with producers in Alberta, and this is a plentiful supply because it is about 10% more than the volume represented by all our sales contracts in both Canada and the U. S.

At the present time, there are about 1,100,000 customers using natural gas in Canada, and we are pleased that about 750,000, or two thirds of these are being served with natural gas hauled by our company.

In the area we serve, new residential customers are being added at a rate in excess of 60,000 per year, and nearly all of these domestic customers will use natural gas to heat their homes.

In Manitoba and central Ontario, nine out of every 10 new homes being built in areas where natural gas is available are installing gas furnaces and in Toronto this proportion is running at about 85%.

In many areas, for every new home connected to the distribution mains, another is being converted to natural gas from another fuel.

To be realistic about the Canadian natural gas transmission business, it must be recognized that relatively, it is still in its very early growth years.

However, a major step forward was taken last April 1 when the government of Canada accepted the recommendation of the National Energy Board that the export projects of Westcoast Transmission Co., **Alberta & Southern, Canadian Montana,** and Trans-Canada be approved.

Since then we have received Gas License No. 2 authorizing the export of 204 million cu. ft. at Niagara Falls, on an interruptible basis, at our discretion after all Canadian requirements have been fulfilled.

The Niagara Falls sale is very important to the welfare of Trans-Canada and will help us maintain a high load factor and enable us to approach optimum economic operating conditions. However, we are hopeful that the U. S. Federal Power Commission hearing will be held within a few weeks, and that we will be selling gas at Niagara Falls by the fall of this year.

In the meantime, our export program at Emerson, Man., is proceeding right on schedule. We expect to be actually selling gas to the American market from Emerson by next October.

The expansion of this industry will require huge amounts of capital money within the next few years. **It has been estimated that $300 million will be required for field development and processing facilities in Alberta and British Columbia,** plus another $200 million for gathering facilities and additional transmission facilities.

Indicative of the extent of this future investment in transmission facilities in our company's 1960 construction program. It is a $39.9 million program, and about $22 million of this capital expenditure is associated with our export to **Midwestern Gas Transmission Co.** at Emerson.

This 1960 construction program will be financed by the sale of $13 million of First Mortgage Pipeline Bonds which we recently placed privately with institutions.

This is the only public financing required this year, except for the sale of subordinated income notes, committed for in the terms of the company's original financing.

Any additional financing will be obtained by bank borrowings which have already been arranged. We will build 50 mi. of 30-in. pipeline, and add eight new compressor stations to our system so that by next fall we will have 148,585 hp of natural gas engine or turbine driven compressors on the line to help natural gas to market.

Among the major aims of the Investment Dealers' Association of Canada are: Keep high standards in the underwriting and marketing of securities; educate investment firm staffs and the public in investment principles and practices.

Here are excerpts from the reports of the IDA's six district chairmen:

Mid-Western

By J. D. BULGIN, Dominion Securities Ltd., Winnipeg, retiring vice-president and chairman, mid-western district.

The education committee was very pleased when they found that registrations for the University Extension Course "Investments" were so large that a second section had to be arranged. This committee also introduced a course for industry which was well received.

The matter of irregularities in the way accrued interest on sale of securities is billed has deeply concerned us. The basic principle was thought to be, that accrued interest should run until actual physical delivery is made.

The university course in Winnipeg on the subject, "Your Investment in Securities" had the greatest enrolment yet of 127. It was therefore decided to divide the course into two groups. These groups met at different times with our lecturers performing double duty.

Mike Bulford of **Greenshields & Co.** was given the job of organizing "Courses for Industry". One course was given to **Hudson's Bay Co.,** senior and managerial personnel.

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(Continued on page 32)

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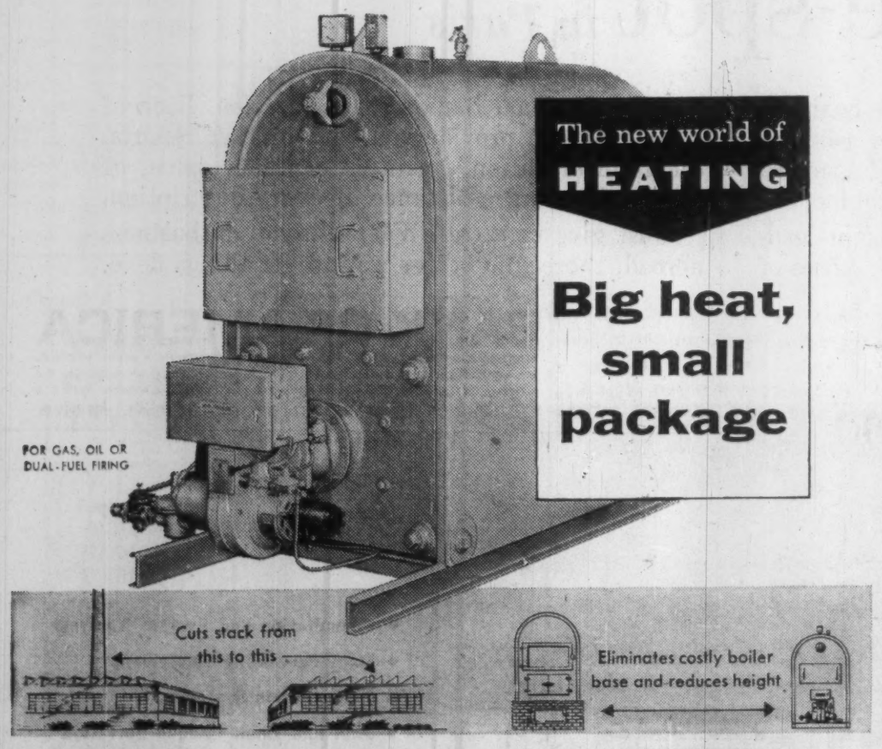

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Mid-Western

(CONTINUED FROM P. 31)

katchewan an eight-week course was held in Saskatoon in February and March. Average attendance at the lectures was 30 people. This is the second year that this course was held in Saskatoon, with approximately the same attendance.

No courses were held in the City of Regina over the past 12 months, as it was felt by the Education Committee that interest on behalf of the public would be stimulated, if a year were allowed to elapse between the presentation of such a course.

During the past year there has been considerable activity on the part of the Saskatchewan Securities Commission in closing down and, in some cases, prosecuting either by fine or jail term, a number of the so-called "bucket shop operators" or investment firms who were engaged in the promotion and selling of almost worthless stocks.

These firms were not members of the IDA, and on the whole, the Securities Commsision has carried out recommendations that we, as IDA members, had suggested in the past two or three years for curtailing such illicit operations.

Members of the IDA, however, do have a problem on new issues where accrued interest has to be charged. This, in some cases, has caused a certain amount of confusion on the part of both our clients and ourselves and, I strongly suggest that a firm stand on this should be taken by our organization at the top level.

Your business conduct committee is pleased to report that it has had no occasion in Manitoba to undertake major action in connection with the business conduct of members during the past year.

Minor infractions of certain regulations have had to be considered, among which were reported instances of price cutting on new issues before price restrictions were removed, and the matter of accrued interest to delivery of new issues.

A significant change took place in the composition of the Municipal and Public Utility Board, the government agency charged with the responsibility of administering the Securities Act. On Nov. 30, 1959, the Public Utilities Board was created and charged with the responsibility of administering the Real Estate Act, the Securities Act and regulation of all public utilities.

All other matters, involving the public interest were placed under the jurisdiction of a newly created Municipal Board.

Elswood F. Bole was appointed chairman of the Public Utilities Board and early this year a letter was received from Mr. Bole asking whether or not any changes should be made in the Securities Act. Our executive felt that the act was effective as constituted and did not recommend any changes at the present time.

The Public Utilities Board have indicated that the provisions of the act are under review but that no major changes are contemplated at the present time.

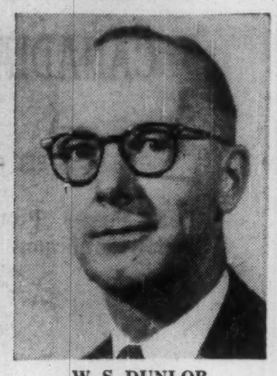
In September 1959, invitations were sent out to approximately 40 service clubs in Greater Winnipeg, offering the services of the speakers' panel and outlining topics which were available.

Thirteen of these organizations took advantage of this offer and speakers, on our behalf, addressed approximately 555 persons.

During the past year, there have not been any changes in Provincial legislation affecting our business. It is anticipated that over the next few months some changes will be made and reports will be submitted outlining the new legislation.

IDA Regional Chiefs

D. B. SHAW
A. E. Ames & Co.
Toronto
(Ontario District)



W. S. DUNLOP
Oldfield, Kirby & Gardner Ltd.
Winnipeg
(Mid-Western District)

Alberta

By T. W. MEREDITH,
Osler, Hammond & Nanton Ltd., Calgary, retiring vice-president and chairman, Alberta district.

Your executive committee as a whole constituted the business conduct committee and in this regard, I report pleasurably an inactive year. Several minor infractions were reported and solved amicably.

In Calgary, a total of 49 students enrolled this year in the "Managing Investments" course. This enrolment was somewhat below the number that attended in previous years.

A series of three to five minute radio talks on investments was received from Toronto and it is likely that CKXL will be carrying the feature in the near future as a public educational gesture.

A series of seven one-hour lectures were given by various members to a Calgary YMCA group during March and April.

Requests were received from economic teachers at various local high schools for information about our business. Arrangements were made for these teachers to receive a copy of our home study course "How to Invest Your Money".

In Edmonton the lecture series presented in conjunction with the Department of Education, University of Alberta, occupied the main interest of this committee this year. The eight lectures were attended by 67 enrolled in the course, which is approximately double the attendance of the previous year.

The correspondence course offered by the university of Alberta had 72 enrolled during the year.

Investment clubs are still numerous and there is always a demand for IDA members to attend and speak at these meetings. I feel the local IDA members are to be commended for the time and effort spent with these clubs as we realize the monetary rewards are small but it is a means, I would say, of widening our association with the public in general.

The two most significant developments in this field of municipal finance in the last several months were the Provincial Goverment's Bill to (1) pre-empt a portion of the industrial tax field and (2) grant municipalities power to collect taxes from companies operating pipelines and power transmission lines.

In the face of strenuous opposition from the small opposition group within the legislature, the cities themselves, the press, and the industries likely to be affected, the government allowed the proposed bills to die on the order paper. Instead bills were introduced enabling the government to set up a special assessment board to survey the proposed new tax fields.

If this board can complete its work in time, there is some possibility that a fall session of the legislature may be called to take action on their reports. The new tax moves have in all probability only been postponed.

No progress was made in legislation to provide for amalgamation of Edmonton and its neighboring municipalities. The problems of financing and planning for both Edmonton and Calgary have not diminished and if anything are more pressing than ever.

Amendments to the Securities Act were of a minor technical nature.

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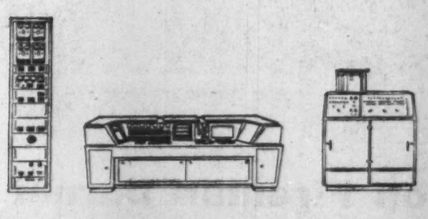
BANK OF AMERICA (INTERNATIONAL): NEW YORK CITY 5

FERRANTI PACKARD ELECTRONICS



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Research and development services and complete facilities for production of systems equipment and Digital and Analogue Computers are located at our Toronto plant.

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IDA Regional Chiefs

T. W. MEREDITH
Osler, Hammond & Nanton Ltd.
Calgary
(Alberta District)

JAMES A. MacMURRAY
Eastern Securities Ltd.
Saint John
(Atlantic District)

W. T. BROWN
Odlum Brown Investments Ltd.
Vancouver
(Pacific District)

J. EDGAR HILL
Royal Securities Corp.
Montreal
(Quebec District)

Atlantic

By R. C. HEBB, Dominion Securities Ltd., Halifax, retiring vice-president and chairman, Atlantic district.

In November we had the pleasure of welcoming our president, N. J. Alexander; and managing director, H. L. Gassard to this district. In both Nova Scotia and New Brunswick the usual procedure of meetings with the respective premiers of these provinces, the securities commissioners, educational institutions, and representatives of the press and radio was carried out.

One of the highlights of the President's visit to Halifax was the presentation to Radio Station CHNS of the first Certificate Award ever presented by the IDA of Canada.

The award was presented for a series of broadcasts by our own members over this station in 1958-59 covering the principles of sound investment and the promotion of education of the general public in the investment industry.

Saint Mary's University in co-operation with The Investment Dealers Association of Canada, Nova Scotia Branch, sponsored a seven lecture series on "Investment Principles and Practices."

Due to a more intensified advertising schedule, which included personal visits to several of the larger employers in the area, attendance increased from 25 to approximately 40 persons.

With the co-operation of Fred Arenburg of Radio Station CHNS, representatives of each of the 12 Investment Dealers in Halifax area participated in a 40 script radio series, during the spring of 1960.

The scripts were pre-recorded and then broadcast twice a day, three days a week, and according to the radio station, many favorable comments were received concerning the subject matter.

Following the series, arrangements were made to have the scripts revised somewhat and published at the rate of one per month in the Halifax Board of Trade Publication.

As there are 40 scripts involved, this operation will be extended over a period of approximately three years.

This past year saw a number of questionable organizations set up in Saint John to deal in securities with U. S. citizens via telephone and mail. Numerous inquiries have been received by individual members of the IDA as well as by the Committee, but to date little progress can be reported in eradicating these organizations.

Ontario

By R. A. DALY, R. A. Daly & Co., Toronto, retiring vice-president and chairman, Ontario district.

Enrolments in the two courses for investment traders' staff totaled 693 students last year.

The most important undertaking of the internal education committee during the past year was continued supervision of a Canadian textbook on corporation finance.

An outstanding university professor in Western Canada read the finished material on behalf of the publisher and professional readers in the financial industry read the material in the east on behalf of the association.

In all cases the commentary was not favorable, resulting in the appearance of the text being postponed for at least one year.

The result is that the earliest date for the appearance of the text is for the commencement of the 1961-62 courses.

We arranged with CBC that the subject of investments will be treated on eight broadcasts of Trans-Canada Matinee, a woman's program. These "spots" will probably occupy five minutes each week and will be under the general direction of Mrs. Jean Edmonds of Winnipeg. These began May 11.

By the time the season closes two IDA teams will have given nine lectures to about 500 persons at: **Robert Simpson Co., General Motors of Canada Ltd., Massey-Ferguson Ltd., Toronto Daily Star, Abitibi Power & Paper Co., Canadian Pacific Railway, The Bell Telephone Co., Ford Motor Co. of Canada.**

About 800 took the home study course — an all-time high — offered by the University of Western Ontario.

At the University of Toronto lectures enrolment reached about 130.

The taxation committee this year concentrated its efforts on Provincial Security Tax and submitted a brief to the provincial treasurer in January of this year.

The committee was notified toward the end of March by the Tax Department, Queen's Park, that they cannot allow any of the tax concessions requested in our recent brief. However, they did indicate that they would be willing to have further discussions with us in the forthcoming year.

This has been a fairly active year in speaking activity with a total of 59 engagements filled by the speakers' panel at the end of April.

During the 1959-60 year considerable time was spent discussing some of our rules and regulations. Several of the proposed changes have been adopted, mostly relating to trading.

I am happy to report again that few complaints reached our committee regarding the business conduct of our members.

The provincial government legislation committee was not called upon to engage in any activity in 1959-60 in respect of the Ontario district of the IDA.

The main matter for the stock exchange liaison committee was to investigate safekeeping charges on clients' securities.

It was finally decided that due to the difficulty of enforcing a mandatory charge and the administrative problems involved in making safekeeping charges, that this matter be dropped.

Quebec

By R. B. CASGRAIN, Casgrain & Co., Montreal, retiring vice-president and chairman, Quebec district.

During the year certain problems were solved. Of importance to our members was the abolishment of Quebec Security Transfer Tax on government guaranteed, municipal and school bonds.

The new Minimum Capital Regulations which come up for approval in June were introduced last October and the district auditor was present at the district annual meeting to answer questions from the members.

A committee was formed to present a brief on the improvement of City of Montreal financing methods to the Montreal Civic Inquiry Commission.

The business conduct committee assisted the Quebec Securities Commission in informing them of questionable practices by financial firms not connected with IDA.

The perennial suggestion of a service charge on holding of clients' securities was dropped as little interest was shown by member firms. A memorandum was submitted to the national executive on violations of new issue terms. A re-vamping of the funded debt booklet was initiated by the committee.

We are pleased to report that no complaints against member firms were lodged with this committee.

This committee initiated a change in the Trading Regulations concerning Government of Canada and Government of Canada Guaranteed bonds which was approved by the Montreal and Toronto bond traders and the national executive.

A brief concerning security transfer taxes was prepared and submitted to the Minister of Finance of Quebec. As a result of a great deal of personal contact work carried out by the district chairman, the Provincial Government passed an Order-in-Council which exempted from transfer taxes government guaranteed securities and Quebec municipal and school board securities. I believe that the Minister of Finance stated that

(Continued on page 34)

the smallest yet most important investment in this building was the fee of the

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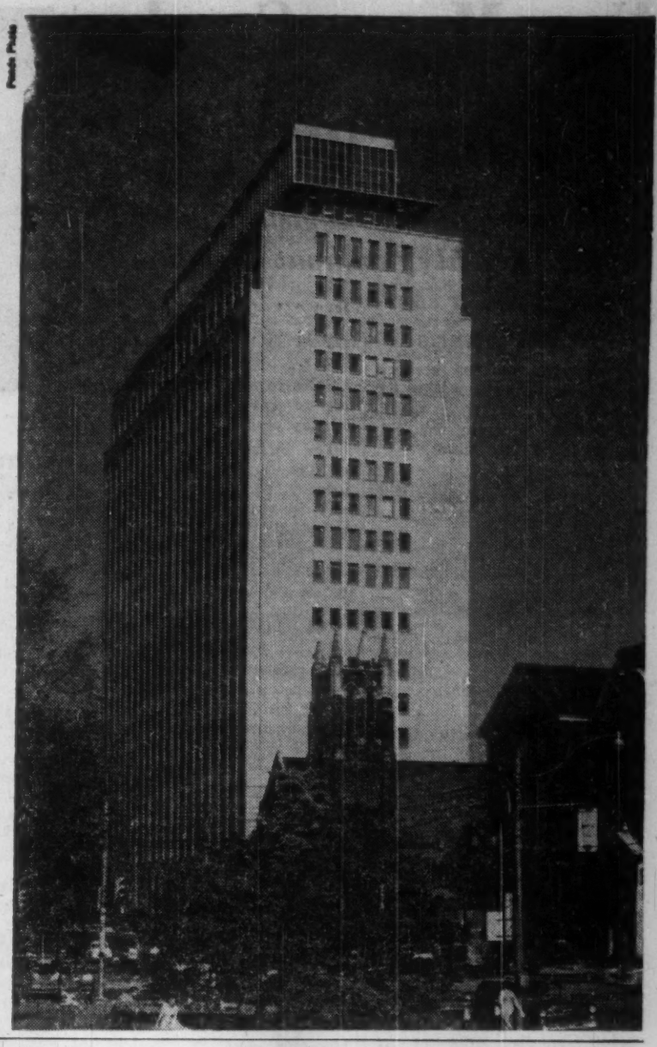

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ANNOUNCEMENT

GREAT-WEST LIFE DIRECTOR

DONALD M. ELLIMAN

The Great-West Life Assurance Company has announced the appointment of Donald M. Elliman of New York to the Board of Directors. Mr. Elliman is President of the Bank of New York.

Why so many people are glad they bought a Mercury

Mercury Monterey four-door sedan, one of Ford of Canada's fine cars

Certain features illustrated or mentioned are standard on some models, optional at extra cost on others.

A car like Mercury is the sum total of the fine car maker's skill. Size is based on how large the outside must be to give ample room for six adults (with hats and elbows) inside.

Styling is a melding of this outside package with graceful, functional metal, contemporary to protect your investment. Finished in multiple coats of enamel to stay as new looking as the day you chose it.

So many people have bought the 1960 Mercury that it is apparent many people still want the quality, the room, the power, the silken riding comfort that goes without saying in a bigger, luxury car like the distinguished Mercury.

But, the only way you can experience the complete satisfaction of this quality and luxury, is to visit a Meteor-Mercury-Frontenac dealer and drive a Mercury. Drive one soon and join the move to Mercury. You'll be glad you did.

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PARK LANE · MONTCLAIR · MONTEREY · COUNTRY CRUISERS

A FEW REASONS WHY YOU'LL BE GLAD YOU BOUGHT A MERCURY

...every time you look inside
Mercury offers you deluxe interiors in every distinctive model at no extra cost. Rich fabrics, wall-to-wall carpeting, luxurious appointments.

...every time you drive it
Handling a Mercury is pleasure itself. Its potent Marauder V-8 gives you instant command of the highway. And Mercury brake-power is swift and certain—self-adjusting for extra safety.

...every time you ride in it
Mercury is built for silence, designed for comfort. Its Road-Tuned wheels move back and forth as well as up and down to smother road shocks. You ride vibration-free in quiet comfort.

SEE STARTIME TUESDAYS, DEPUTY THURSDAYS, ON CBC-TV. CONSULT TV LISTINGS FOR LOCAL TIMES AND CHANNELS

New Meter Grades Uranium in Mine

System allows geologists to assay ore quickly without sending samples to surface . . .

By DAVID FRANCIS

After eight years of research, a Canadian electronics firm has developed an instrument that is expected to increase the efficiency of uranium mines.

The firm:

Electronic Associates Ltd., Willowdale, Ont.

The instrument:

An underground radiometric assay system.

It provides the geologist or grade control officer with the ore grade at the rock face, immediately and more accurately than by previous methods, the firm says.

This enables the geologist to plan the direction of the drive into the richest ore without waiting 24 hr. or more for ore samples to be sent to the surface and assayed by conventional means.

Once the system is established, it may make the surface assay laboratory at a uranium mine unnecessary, says Bernard Stapley, applications engineer.

Electronic Associates has sold 12 of the instruments to six firms representing most of the major Canadian uranium producers.

Stapley plans to assess the market in the U. S. in a few weeks.

Sales in the U. S. are essential to cover research costs, Stapley says.

The instrument costs $2,050 for one — less for a quantity order.

It is transistorized, weighs only 20 lb.

The instrument establishes the grade of the uranium ore by taking measurements of radioactivity.

Previous attempts to produce such an instrument have not been successful because the high background level of radioactivity in a mine tends to obscure the measurement of the rock face, Stapley says.

The new instrument measures first the gamma radiation of the disintegration products in uranium ore. Then a sliding window is opened and the detector head measures both gamma and beta radiation.

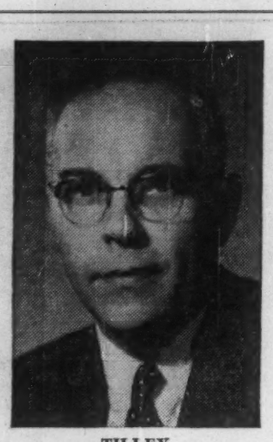
With the two readings, the geologist picks out the ore grade from a table of figures carried with the instrument.

Basic design for the instrument, adopted after earlier versions proved inaccurate, was the idea of Eric Leaver, president of the small firm.

He and George R. Mounce founded the firm in 1945 and it now has about 70 employees.

The firm designs specialized electronic equipment to solve special problems.

Leaver was an employee of **Research Enterprises Ltd.** during World War II. Mounce was with the National Research Council. Both are professional engineers.



TILLEY

Name A. R. Tilley Head of Institute

A. R. Tilley of Montreal is new chairman of the Chartered Institute of Secretaries in Canada.

He is vice-president of **Imperial Tobacco Co. of Canada.**

Other officers elected:

H. W. Johnson, **Northern Life Assurance Co. of Canada,** and G. T. Jackson, Department of Public Works, vice-chairmen; C. B. Bell, secretary.

Other directors are:

N. E. Brown, Vancouver; H. H. Edmison, Toronto, C. J. Ford, Vancouver, C. W. Harris, C. E. N. Kaulbach, Montreal, G. A. MacLachlan, London, and B. B. Upshall, Toronto.

Quebec

(CONTINUED FROM P. 33)

this change would reduce the government's revenues by about $120,000 per annum.

The municipal finance committee has met on several occasions during the course of the year to discuss municipal financing in the Province of Quebec, in view of promoting better marketing facilities and relations with the different government bodies.

We have provided speakers to 30 organizations and groups from September 1959 until the end of May 1960. This represents a substantial improvement over previous years.

The translation and printing of the French Course I Unit material for investment dealer staff was completed by Laval University in the fall of 1959.

Laval University distributed some 700 copies of the French Home-Study Course during the year including 300 to the general public, 120 to Caisses Populaires, 125 in connection with Public Lecture Series at the Universities of Montreal, Sherbrooke and Laval; 100 to students of Faculties and 45 to I.D.A.C. Course I students.

The education committee arranged two industry courses during the year — one for employees of The Bell Telephone Co., and the other, Du Pont of Canada.

Public lecture series took place at the University of Montreal, University of Sherbrooke, McGill, Laval and at the Huntingdon Community School.

Pacific

By A. G. OSBURN, Pemberton Securities Ltd., Vancouver, retiring vice-president and chairman, Pacific district.

The British Columbia Securities Act needs revision and a number of discussions have been held by your Association with the Superintendent of Brokers in conjunction with the B. C. Bond Dealers Association and the Vancouver Stock Exchange.

The PGE Parity Bond issue was a new departure, in provincial financing and resulted in some initial confusion, however, the results were quite significant.

One outstanding event for all of us in the past year has been the formation of the Junior Investment Dealers' Association of Canada in the Pacific District.

Your education committee was responsible again this year for a series of 10 public lectures given in conjunction with the University of British Columbia and the Burnaby School Board. The total attendance was 215—140 at the University of British Columbia and 75 at Burnaby.

During the year we were asked to work with the representative of the Canadian Bankers Association, in order to formulate a regulation covering the trading of the Pacific Great Eastern Railway, 5% Parity Development bonds. As this report is written, we have not yet come to a definite conclusion in conjunction with the banks.

Because of the information which we have at hand, the Pacific District did, however, subject to the subsequent approval by the National Executive Committee, issue instructions regarding the handling of these bonds.

It was felt that whenever a dealer could profitably use the P.G.E. 5% Parity Development bonds he should purchase these bonds, plus accrued interest, and make a service charge of ¼ of 1% (being an indication only of a relative commission.) The bonds also were declared exempt from the regulation governing regular delivery and trading practice.

During the year several complaints were registered by Members of the IDA regarding high pressure methods of salesmanship and promotions.

These complaints were investigated and in several cases referred to the Superintendent of Brokers for action. His department appreciated the information given them and were in every way most co-operative.

With reference to provincial legislation, liaison was closely maintained with the Attorney General and the Superintendent of Brokers regarding legislation amending the Securities Act.

It is expected that further negotiations will continue throughout the year with the appropriate provincial authorities in this most important matter.

ANNOUNCEMENT

Canada Decalcomania Co. Limited Appointments

CLEM WADE ROBERT BROAD

Mr. F. Ralph Broad, President, takes pleasure in announcing the election of C. E. Wade, Plant Manager, and R. C. Broad, Sales Manager, to the Company's Board of Directors.

Mr. Clem Wade brings a long and wide experience in Decalcomania and related production fields to his extended responsibilities as Director of Production for the Company and its subsidiaries.

Mr Robert Broad, as Vice President in Charge of Sales, is responsible for the Sales policy of the Company and assumes overall direction of sales for expanding domestic and overseas operations.

Stationery Firms Merge Operations

Callow Bros. Ltd. and **Beare's Ltd.,** two Toronto stationery firms, are merging operations.

Both companies will operate separately and each will retain its identity, William A. Becker, chairman of the board of the newly amalgamated companies said.

Beare's has sales offices and warehousing in Edmonton and sales facilities in the Maritime provinces.

H. B. Stevenson, president of Beare's, has also been appointed president of Callow Bros. He is also president of the Commercial Stationers' Association of Toronto.

Arthur S. Loffree has been appointed vice-president of Callow Bros. Loffree joined Callow Bros. 32 years ago as an office boy.

DATA CENTRES

Johns - Manville Corp., New York, will establish six regional data processing and accounting centres in the U. S. Company said it expects to establish one or two similar centres in Canada.

FENCO

serves Canada

Harbour Development Model, St. John's, Newfoundland.

FENCO provides industry and government with complete engineering services, from preliminary studies and reports, working drawings and specifications to the supervision of construction.

Specialized services are available for transportation, marine structures, mining and metallurgical, pulp and paper, chemical and petroleum, and industrial projects.

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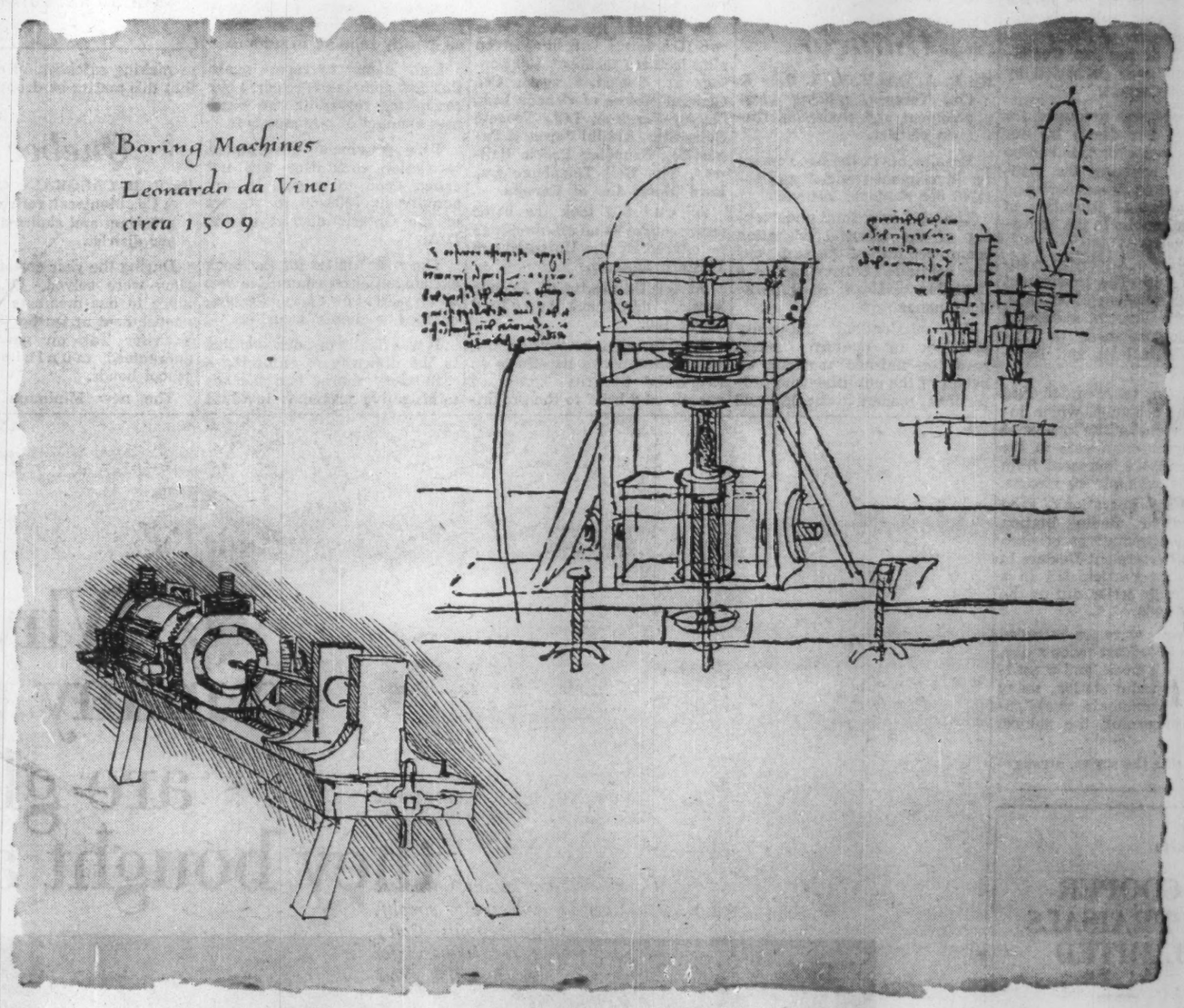
VANCOUVER TORONTO MONTREAL



LEONARDO DA VINCI, *in addition to being an artist, engineer, and inventor, was also a superb craftsman. Reproduced here are original sketches by Da Vinci of boring machines—one for boring cylinders, the other featuring a unique self-centering device.*

CRAFTSMANSHIP

Illustrated below is a giant vacuum column used in oil refinery operations. This is a typical example of the fine craftsmanship and many sided skills demonstrated by Canadian Vickers in the manufacture of all types of petro-chemical equipment. In their plants, Canadian Vickers also design and manufacture machines, both large and small, and equipment for every imaginable industrial need . . . thereby fulfilling their pledge: "If Industry Needs It . . . Canadian Vickers Builds It . . . Better."

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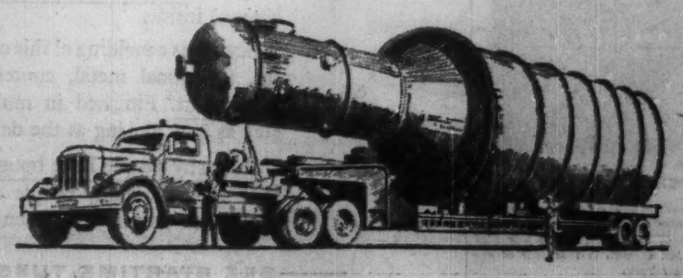

50-ton vacuum column with overall length of 74 ft., built by Canadian Vickers for a Canadian oil refinery.

From initial kiln drying, through manufacturing, to final shipment, each strip of Bruce oak flooring is carefully processed and inspected. It must reach a constant high standard of quality before Laidlaws add it to the large inventory always ready for immediate delivery.

Builders start here!

Giving personal attention to his building project is the builder's way of leaving his signature. Through lumber dealers, Laidlaws help him meet his building commitments by maintaining a comprehensive range of lumber and allied materials, thus assuring he gets what he wants . . . when he wants it.

Laidlaws buying power, wide selection of products and a large replacement inventory, eliminate the embarrassment of a lost sale or contract.

Special requirements are handled with careful attention in the planing mill and manufacturing division by highly skilled personnel using the most modern equipment . . . a plant geared to supply the best.

From Laidlaws you get *what you want . . . when you want it.*

LAIDLAWS

Serving the industry better—through lumber dealers

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Canadian Auto Production

	Week Ending June 11	Same Week 1959	Year To Date 1960	Year To Date 1959	% Change To Date
CARS					
General Motors:					
Buick	159	130	5,452	5,177	
†Chevrolet	2,022	1,928	47,545	45,029	
Oldsmobile	165	265	6,135	9,129	
Pontiac	1,882	1,673	43,809	36,643	
	4,228	3,996	102,941	95,978	+7
***Ford:**					
†Ford	1,310	1,449	32,014	28,324	
Mercury	166	81	2,730	3,831	
†Meteor	823	831	16,393	18,299	
Monarch	152	76	2,820	3,121	
	2,451	2,483	53,957	55,086	—2
Chrysler:					
Chrysler	143	182	3,029	3,633	
DeSoto	85	26	1,808	666	
Dodge	608	670	12,312	11,754	
†Plymouth	495	495	10,908	9,363	
	1,331	1,373	28,057	25,416	+10
Studebaker-Packard:					
Studebaker	160	48	2,685	3,686	—27
Total cars	8,170	7,900	187,640	180,166	+4
TRUCKS					
General Motors	817	986	21,182	18,124	
Ford	439	335	10,159	8,989	
Chrysler	140	241	3,368	3,605	
International	237	440	5,942	7,047	
Total trucks	1,633	2,002	40,651	37,765	+8
Total cars, trucks	9,803	9,902	228,291	217,931	+5

*Includes Edsel production, 1959 model year.
†Chevrolet includes Corvair, Ford includes Falcon, Meteor includes Frontenac, Plymouth includes Valiant.
Source: Canadian Automobile Chamber of Commerce.

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INDUSTRIAL PRODUCTS DEPARTMENT
CANADIAN GENERAL ELECTRIC COMPANY LIMITED

457W-360

Corporation Bonds

(Supplied by Investment Dealers' Association of Canada)
June 14, 1960

Public Utility Issues:	Int. Rate %	Due	Bid	Ask.	Prev. Week Bid
Alg. Cen. H.B.R.	5½	'79	94½	...	94½
Bell Phone	5	'72	94½	96	93½
Bowater Pwr.	3½	'80	78½	...	78½
Braz. Traction L. & P.	4½	'70	79½	83½	79½
B. C. Electric	5½	'88	90	92	89½
Do.	5½	'77	98½	100½	96
B. C. Phone	5	'52	90	92	89
Calgary Pwr.	3½	'72	78	...	78
Consumers' Gas	5	'78	89½	92½	89½
Gatineau Pr. D	3½	'70	81½	83½	80
Gt. Lakes Pr.	5½	'77	96	98	95
Maclaren-Quebec Power	3	'69	80½	...	80½
Mexican L. & P.	5	'75	78	...	78
Nat. L. & Pr.	4½	'61	98½	99½	98
North. Que. Pr.	4½	'67	86	...	86
Power Corp.	5½	'77	93	...	93
Que. Nat. Gas	5½	'65	82½	85½	85½
St. Maurice Pr.	3½	'70	81	83	81½
Shaw. W. & Pr.	4½	'76	88½	90½	87
Tr. Can. P. L.	5.85	'87	91½	93	90½
W'coast T. Deb.	5½	'88	74	76	74½
Industrial Issues:					
Abitibi Pr. P.	6½	'77	100	...	99½
Do.	4	'74	83½	...	82
Acadia-Atlantic Sugar	4	'74	80½	83½	81
Alum. of Can.	4½	'73	88	91	87½
Bathurst P. & P.	5½	'73	93	95½	93
Bicroft-Uranium	5	'62	97	99	97
Can. Bread	4½	'67	87½	...	87
Can. Cement	5½	'76	92½	95½	92½
Can. Steamship	4	'66	89½	...	89½
Cdn. Brew.	4½	'81	84½	...	85
Cdn. Canners	3½	'70	81½	84½	81
Cdn. Celanese	3	'62	94½	...	94½
Cdn. Chem. Co.	5½	'71	90½	93½	90½
Cdn. Industries (1954) Ltd.	3½	'74	81½	84½	80
Cdn. Dyno	6	'63	96½	97½	96
Cdn. Oil	4	'76	81½	84½	80½
CPR	3½	'72	80	...	80
Do.	3½	'66	89½	91	88
Can-Met	5½	'63	91½	92½	90½
Cockshutt F. E.	4½	'65	86½	89½	86½
Cons. Denison	5	'62	97½	99	96½
Dom. Fdrs. & S.	4½	'69	89½	92½	90
Dom. Stores	5½	'76	94½	97½	94½
Dryden Paper	4½	'74	85½	...	85½
T. Eaton Accept.	4½	'74	87	90	86½
T. Eaton Realty	5½	'76	91½	94½	91½
E. B. Eddy	4	'74	77½	...	77½
Elk Falls Co.	5	'75	82½	85½	83
G. Motors Acc.	4½	'69	90½	93½	91
Gt. Lakes Pap.	5	'76	89½	92½	89½
Gunnar Mines	5	'60	98½	...	98
Hud. Bay O & G	4	'75	80½	83½	80½
Husky Oil	5	'69	82½	...	82
Imp. Tobacco	3	'70	80½	82½	80
Imp. Oil	4	'69	81½	84½	81½
Indust. Accept.	6	'77	96½	99	96
Loblaw Groc.	6	'77	98½	...	97½
Lorado Uran.	6	'62	99	100	99
Maple L. M.	3½	'63	92	94	90
Massey-Ferg.	4½	'76	82½	85½	82½
Milliken Lk.	6	'62	97½	98	97½
North Cdn. Oil	5	'75	67½	72½	67½
Northspan	5½	'63	96	97	96
Northstar Oil	4½	'78	84½	81½	82
Ont. Jockey Club ex. wts.	5½	'72	86½	89½	86½
Phillips Elect.	5	'73	87½	...	87½
Price Bros.	3½	'66	86	88	86
Regent Refining	4½	'75	80½	...	80½
Rio Tinto	5	'63	97	97½	96½
St. Law. Corp.	5	'72	92	94	92
Sal.-Shirriff-H.	6	'77	97½	100½	98
Simpsons Ltd.	4½	'73	91½	94½	91½
Steel Co.	2½	'67	84½	87½	84
Traders Finance	4½	'71	90	92	88½
Union Accept.	5½	'68	90½	...	90½
Un. Grain, Gr.	3½	'70	80½	84½	81
West Cdn. O. & G cum. wts.	5½	'73	91	93	91
Weston, Geo.	4½	'71	90½	93½	90
CONVERTIBLE ISSUES					
Abitibi P. & P.	4½	'66	100	...	99½
Atlas Steel Ltd.	5	'67	99	105	99
Braz. Tr. L. & P.	4½	'71	74½	77½	74½
B. C. Electric	6	'84	105	107	103½
CPR	4	'69	87	89	86½
Cdn. Petrofina	4	'72	80	82	79½
Cockshutt F. Eq.	5	'68	84½	87½	85½
Home Oil	5½	'71	88½	91½	88½
Do.	6	'75	92	93	91½
Shaw. W. & P.	5½	'72	105½	107½	104½
Westcoast T.	5½	'88	74½	77½	77½
Loblaw Groc.	4½	'76	88½	91½	113½
Phillips Elect.	5½	'70	88½	92½	88½
S'wood Dairies	5½	'72	93½	97½	93½
Trans Emp. Oils	5	'66	94½	...	94½
Do.	5½	'67	94½	...	94½
Triad Oils	4½	'71	76½	77½	76½

Company Meetings

Date	Company	Place
Jun. 15	Brunswick Min. & Smelt.	Fredericton, N.B.
Jun. 16	Eldrich Mines	Toronto
Jun. 15	Joburke Gold Mines	Toronto
Jun. 16	Maritimes Mining Corp.	Fredericton
Jun. 16	North Rankin Nickel M.	Toronto
Jun. 17	Baska Uran M.	Toronto
Jun. 17	Can. & Dom. Sugar Co.	Toronto
Jun. 17	Cdn. Home Ass.	Montreal
Jun. 17	Obaska Lake M.	Val D'Or, P.Q.
Jun. 17	Pacific Petroleums Ltd.	Calgary
Jun. 17	Pickle Crow M.	Toronto
Jun. 17	Que. Metallurgical Industries Ltd.	Ottawa
Jun. 17	Union Gas Co.	Chatham, Ont.
Jun. 17	H. G. Young Mines	Toronto
Jun. 20	Coniagas Mines	Toronto
Jun. 20	Cons. Bellekeno Mines	Toronto
Jun. 20	Cree Oil of Can.	Toronto
Jun. 20	Grand & Toy Ltd.	Don Mills, Ont.
Jun. 20	Lyndhurst Mining	Montreal
Jun. 20	Manitou-Barvue Mines	Toronto
Jun. 20	Sturgeon River Mines	Toronto
Jun. 20	Ultra Shawkey Mines	Toronto
Jun. 21	Barnat Mines	Malartic, P.Q.
Jun. 21	Bevcon Mines	Malartic, P.Q.
Jun. 21	East Malartic Mines	Malartic, P.Q.
Jun. 21	Goldale Mines	Toronto
Jun. 21	Malartic Goldfields	Malartic, P.Q.
Jun. 21	McWatters Gold Mines	Toronto
Jun. 21	Newnorth Gold Mines	Toronto
Jun. 21	Perron Gold Mines	Malartic, P.Q.
Jun. 22	Anglo-Scand. Inv. Corp.	Montreal
Jun. 22	Deinite Mines	Deloro Township
Jun. 22	Dom. Equity Invest.	Montreal
Jun. 22	Dom. Textile Co.	Montreal
Jun. 22	Lake Shore M.	Kirkland Lake, Ont.
Jun. 22	Little Long Lac G.M.	Kirkland Lake
Jun 22	Wright-Hargreaves M.	Kirkland Lake, Ont.
Jun. 23	Ansil Mines Ltd.	Toronto
Jun. 23	Cdn. Converters' Co.	Montreal
Jun. 23	Daering Explorers Corp.	Toronto
Jun. 23	Jack Waite M.	New York
Jun. 23	Lake Wasa Mining Corp.	Montreal
Jun. 23	National Grocers	Toronto
Jun. 23	Peruvian Oils	Toronto
Jun. 23	Sylvanite G.M.	Kirkland Lake
Jun. 23	Towagmac Explor. Co.	Montreal
Jun. 23	Tyranite Mines	Kirkland Lake
Jun. 24	Arjon Mines	Toronto
Jun. 24	Canman Industries	Toronto
Jun. 24	Frobisher Ltd.	Toronto
Jun. 24	Hi-Tower Drilling	Calgary
Jun. 24	R. J. Jowsey Mines	Toronto
Jun. 27	Bicroft Uran. M.	Toronto
Jun. 28	Brazilian Traction	Toronto
Jun. 28	Calalta Petroleums Ltd.	Calgary
Jun. 28	Phillips Oil Co.	Calgary
Jun 28	St. Maurice Gas Inc.	Montreal
Jun. 29	Canada Oil Lands	Calgary
Jun. 29	Dominion Stores	Toronto
Jun. 29	Iso Mines	Toronto
Jun. 29	Orchan Mines	Toronto
Jun. 29	Silverwood Dairies Ltd.	London
Jun. 30	Blue Bonnets Raceway Inc.	Montreal
Jun. 30	Cdn Canners Ltd.	Hamilton
Jun. 30	Elder Mines	Toronto
Jun. 30	Labrador Oil Corp.	Montreal
Jun. 30	Woodford Royalty Corp.	Montreal
Jul. 11	Yukon Cons. Gold Corp.	Vancouver
Jul. 14	Electra Investments (Can.) Ltd.	Toronto
Jul. 28	Cdn. Collieries Res.	Vancouver
Sep. 19	Sheraton Corp. of Am.	Boston, Mass.

NEW VICE-PRESIDENT

Patrick H. Hoy — prominent executive in hotel industry in Canada and U.S. — has been named senior vice-president of **General Dynamics Corp.** of U.S. Head of the company's Material Service Division, Mr. Hoy is also a director of **National Management Ltd.** of Montreal, **Lord Simcoe Hotel** in Toronto and **Lord Elgin Hotel** in Ottawa.

Profits Here?

A regular listing of latest studies by investment firms.

CANADIAN OIL FACTS—Wood, Gundy & Co., 36 King St. W., Toronto.

TREND OF INTEREST RATES—McLeod, Young, Weir & Co., 50 King St. W., Toronto.

MOLSON'S BREWERY—Watt & Watt, 6 Jordan St., Toronto.

HOLLINGER GOLD MINES—Greenshields & Co., 507 Place D'Armes, Montreal.

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INDUSTRIAL ACCEPTANCE CORP. — Watt & Watt.

ECONOMIC OUTLOOK—Graham, Armstrong Securities Ltd., 437 St. James St. W., Montreal.

CANADIAN BREWERIES LTD. — Equitable Securities Canada Ltd., 60 Yonge St., Toronto.

Unlisted Mines and Oils

Compiled From Quotations by G. E. Leslie & Co., Montreal
June 13, 1960

Stock	Bid	Of'r	Stock	Bid	Of'r
Alsab	—	40	Main Oka	40	50
Aconic	24	28	Martin Bird	3	5
Aconic vtc	20	25	Marpic	3	5
Amal Mng	—	20	Matt Ex	10	15
Arnora	—	2	Miller Cop	4	6
Assce Devp	4	6	Natl Mal	9	11
Atlas Chib	2	4	Nipiron	9	12
Bald Mtn	4	6	Nrth Matt	10	15
Bros'a Chib	5	8	Oklend	3	6
Big Nell	15	25	Pascalis	15	20
Bracemac	9	11	Pine Point	10½	11½
Cdn Jave	9½	10½	Quedon	—	5
Dauphin	10	15	Quejo	2	4
Franksin	—	30	Rand Mal	2	4
Ghislau	40	50	Saucon	320	330
Gibson	4	8	Sheraton	—	45
Glencona	½	1	St Jude	2	5
Hastings	40	50	St Helen	—	25
Hull Iron	110	120	Scott Chib	2	4
Independ	5	8	Starlight	2	4
Imperial M	4	6	Tarpoint	1	3
Kenmac	1	3	Valmont	—	11
Lk Sup Irn	15	25	Wm Leys	2	5
Lun Echo	32	27	Yng Dave	11	14
Lk Chib	—	10			

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FP-260

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writes Mr. W. R. Moody, President, Frank Fales and Sons Ltd., St. John, N.B.

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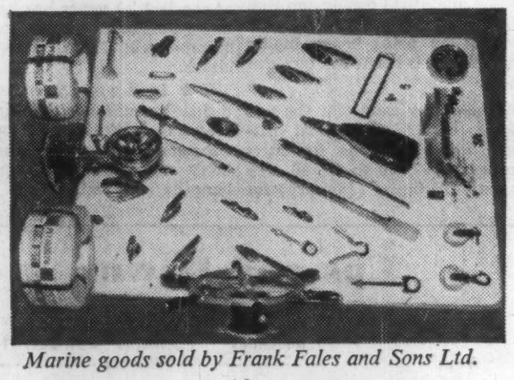
Previously, we always faced month-end work pile-up, resulting in customers' statements being posted late. Now, with the National machine, our customers receive prompt, up-to-date statements every month.



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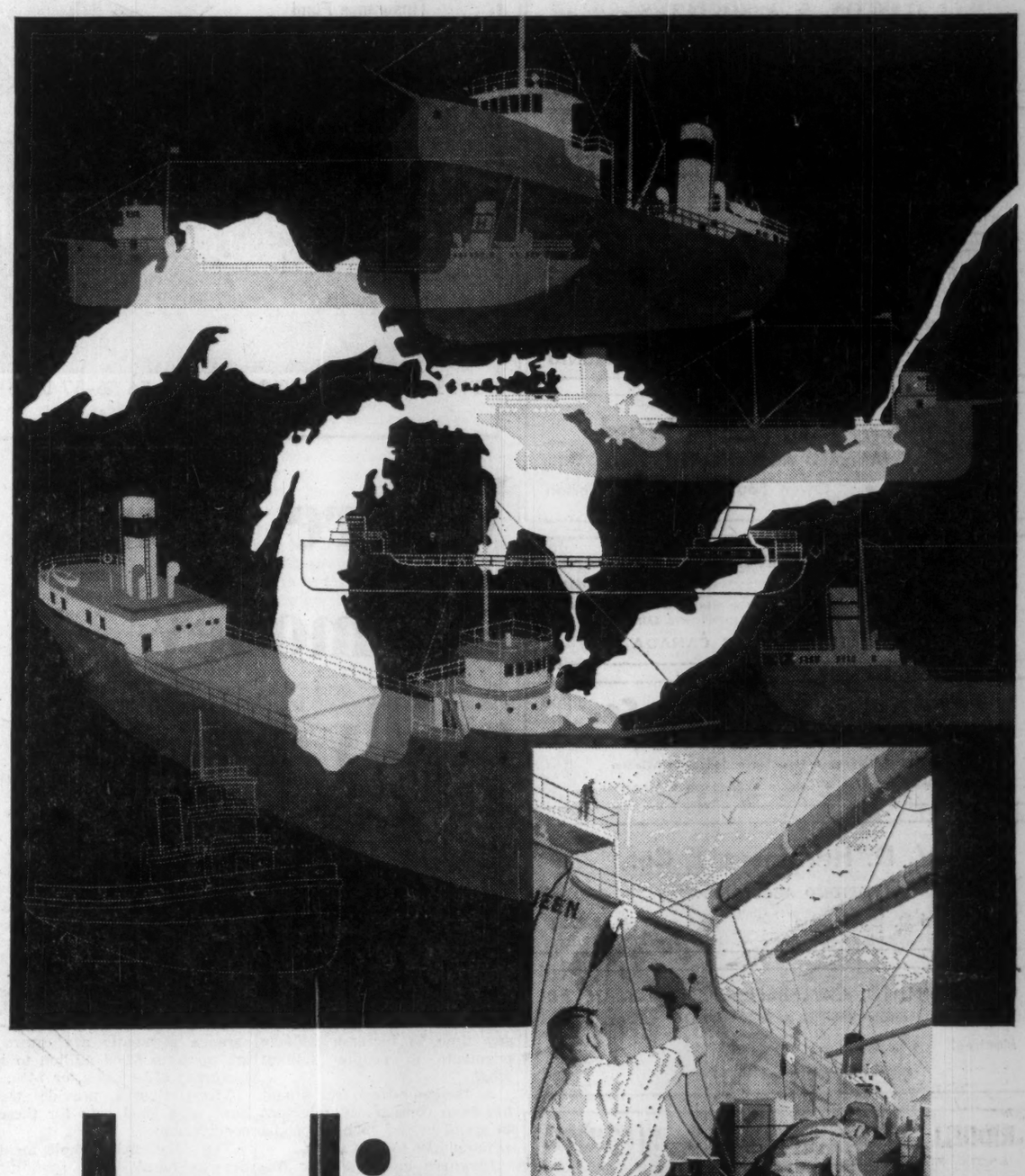

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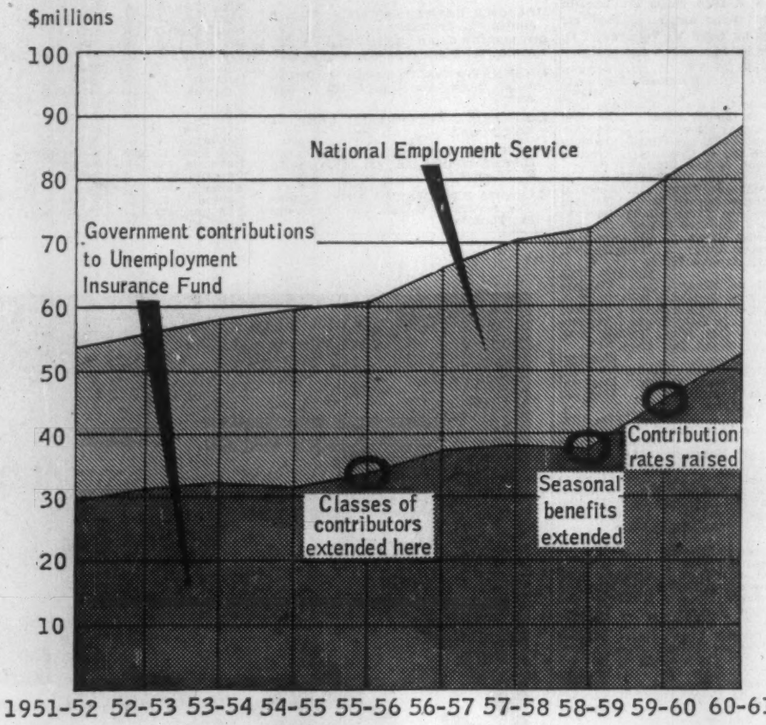
This is What the Taxpayers Gave

Operating Costs of Unemployment Insurance Commission



Where your tax money really goes:

IN UNEMPLOYMENT INSURANCE — No. 5 of a special FP series on major departments of the federal government . . .

By LESLIE WILSON

OTTAWA (Staff)—For years, Parliament has been ready at any time to increase welfare payments to people without jobs.

At the same time, Parliament has been consistently reluctant to spend money to help people without jobs to find them.

Nowhere in the Public Accounts does this fact show up more clearly than in the annual budgets of the Unemployment Insurance Commission.

The commission, which reports to Parliament through Labor Minister Starr, but is administered separately from the rest of the Labor Department, does precisely those two things.

• **Through a network of 200** National Employment Service offices in every major Canadian city or town, it finds jobs for people by matching employers' requests for help with applications for jobs from people drawing unemployment insurance.

• **It also makes** these "insurance" payments to people without jobs.

The two functions are handled, in many cases, by the same people. But they are quite different in objective and purpose.

The Public Accounts doesn't separate the costs of carrying out the two kinds of operation. But since the greater part of the commission's "administration" expenses are for job-finding, you can get an indication of the relative costs of the two functions from this comparison (all figures include price changes):

▸ **In the 10 years** between fiscal 1951-52 and 1960-61, UIC administration costs have risen from $23.9 million to a projected $36.1 million, or 51%.

▸ **Over the same period,** government contributions to the Unemployment Insurance Fund, from which unemployment insurance payments are drawn, are up from $29.9 million to a projected $52 million, or 74%.

These figures provide the basis of a good case for these conclusions:

The National Employment Service hasn't been spending enough money for efficient operation. (Gross National Product which, in broad terms, is the thing served by NES, will be up 72% over the 10 years).

The Unemployment Insurance Fund has been transformed from a source of real insurance against the kind of occasional unemployment which happens to almost everyone in an industrial society to an income maintenance (i.e., welfare) scheme for many people who never expect to be employed all year round.

First, the National Employment Service:

In 1951-52, NES found jobs for 926,000 people. Assigning the commission's entire administration expense to job-finding gives a cost of $25.80 for each placement made. The same procedure gives a figure of $40.70 for each placement made in 1958-59.

By the standards of private placement agencies (where it can cost several hundred dollars to make the simplest kind of placement up to $2,000 or more to make an executive placement) these figures are far too low for efficiency.

They suggest that, at most NES offices, only a very cursory attempt can be made to match employers' requests for help with applicants' requests for jobs. And they explain the disrepute into which NES has fallen among employers as a source of people with technical, executive or professional qualifications.

NES does try to make "executive and professional" placements, mainly at special offices at Montreal, Toronto, Winnipeg and Vancouver; and in the 1958-59 fiscal year did put 6,008 people into better-than-average jobs.

The people included accountants, engineers, nurses, social workers, lab technicians, and various kinds of industrial managers.

These relatively high-level placements made up 7/10 of 1% of NES placements in 1958-59.

The analytical conclusion that NES could increase its efficiency greatly by using more highly paid people is borne out by these facts:

• **The salary range** for the two classes of NES placement officers who find jobs for most seekers is $2,910 to $3,720. The latest DBS figure (January) for the average Canadian industrial wage is $75.05 weekly, a yearly rate of $3,903.

In other words, the average NES placement officer is making less money than the average job-holding Canadian. Most jobs to which NES placement officers send applicants pay better wages than the placement officers are getting.

• **Staff salaries** now account for 71% of the administration costs of the Unemployment Insurance Commission, against 82% 10 years ago. But the average commission employee earned $284 monthly last year, against $318 for the average industrial worker. And the average commission man's salary rose 52% in the last 10 years, against 65% for the industrial worker.

The government has recognized the low-paid status of the placement officer by proposing a consolidation of the two placement classes into one, with a new salary range, $3,900 to $4,350.

Within a few months, NES placement officers will be better paid than the average industrial worker, but they won't be nearly as well paid as the average person who works for a private placement agency.

The new boost in placement officers' pay will be achieved by a supplementary estimate as part of the general revision of civil service salaries now under way (FP, April 9).

All the other changes in Unemployment Insurance Commission administration costs of the last 10 years have been accomplished by similar changes in departmental estimates which Parliament accepted without furor.

On the other hand, changes in operation of the Unemployment Insurance Fund are typically managed by changes in the Unemployment Insurance Act.

In the last decade, the act has been generally revised three times, and there have been several minor changes.

Both Liberals and Conservatives have carried changes through, and both parties, in opposition, have argued about them. But most opposition speakers have taken the line that changes proposed by the party in power were not broad or sweeping enough.

The total effect of the changes of the last 10 years has been to move the fund completely away from any real insurance principles.

The fund now provides additional income for thousands of seasonal workers, i.e., loggers, fishermen, whose contributions don't come close to equaling benefits received.

FP has carried many articles about the drain on the fund caused by these extensions of benefit (i.e., April 18, May 2, June 6, 1959; last Feb. 27).

The table on this page "Ups and Downs", shows the results of the changes on the fund balance.

If you have contributed to the fund either as employer or employee, you helped provide the sums listed under "revenue."

The chart on this page shows the quite different way in which these changes affected you as a taxpayer.

Each year, the government contributes to the fund an amount equal to one fifth of the combined employer-employee contributions. In the 1959-61 fiscal years, these contributions are expected to come to $45 million and 52 million respectively (total $97 million), against $29.9 million in the 1951-52 fiscal year.

It's almost certainly true that at least half of these 1959-61 contributions stem from Parliamentary changes of the last decade in the Unemployment Insurance Act.

Here are the kinds of changes made:

▸ **There were three** extensions of contribution and benefit schedules. In 1950 and 1955, the schedules were widened without changes in contribution rates. Last year, contribution rates were boosted 30% across the board.

▸ **Benefit rates** were changed three times since 1951. In that year, the maximum rate of weekly benefit for a person

(Continued on page 41)

Why Commission Grew

Year	Population* (000)	Labor Force 1. With Jobs* (000)	Labor Force 2. Without Jobs* (000)	% 2 of 1	Unemployment Insurance Commission Placements (000)	Staff
1950	13,712	4,997	166	3.2	685	7,148
1951	14,009	5,117	106	2.0	840	7,076
1952	14,459	5,195	129	2.4	926	6,879
1953	14,845	5,260	137	2.5	996	6,960
1954	15,287	5,258	235	4.3	967	7,020
1955	15,698	5,378	232	4.1	843	7,047
1956	16,081	5,602	180	3.1	995	7,221
1957	16,589	5,746	257	4.3	1,027	7,255
1958	17,041	5,722	405	6.6	858	7,332
1959	17,442	5,878	350	5.9	867	7,496
Annual cumulative growth (%)	2.7	1.8	...	..	...	0.6

*Averages of monthly figures.
†As of March 31 of the year concerned.

Ups and Downs

UNEMPLOYMENT INSURANCE FUND

Year	Revenues	Payments ($ Millions)	Bal. Dec. 31
1941	28.4	....	28.4
1942	67.2	.3	95.6
1945	83.3	14.2	316.1
1948	127.7	39.8	517.6
1950	157.0	94.5	647.7
1952	208.6	118.6	863.8
1954	214.7	239.7	896.6
1956	244.5	209.9	926.8
1958	240.1	492.2	625.3
1959	251.4	405.6	471.1

Balance on hand, April 30, 1960 — $325 million.

Employees Share Profits

Retirement benefits available to employees of **Harding Carpets Ltd.**, Brantford, Ont., are being increased with initiation of a profit sharing pension plan.

Company will contribute 10% of net profits after taxes, less its present contribution to the current employees' pension plan, President C. Malim Harding announces.

First profit shares will be credited to employees at end of the present fiscal year, Oct. 31, 1960.

Payment of profit shares earned each year by individual employees will be deferred until termination of employment, with emphasis on providing a supplemental retirement income to the existing pension plan.

Annual contributions to the profit sharing plan will be held by a trustee. The plan is that the basis of investment will be Harding Carpets' own stock.

Allocation of profits to each member of the new plan will be in direct proportion to his annual income up to a maximum of $10,000 usable income.

Certain provisions of the employees' pension plan (which started in 1948) are being liberalized, company says. In addition, the future service benefit is being increased from 1½% to 1¾%.

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SELECTED GROWTH STOCKS

This is an exclusive series on 26 Selected Growth Stocks chosen by one of the continent's most prominent and successful investment advisers. Each company will be reviewed here quarterly. This series does not constitute a recommendation to buy.

Imperial Oil Sales, Profit Up Best First Quarter Since '57

- *Higher operating efficiency helps earnings . . .*
- *Inco has record first quarter, expects slowdown . . .*

By NESTOR

IMPERIAL OIL'S operations in the January - March period this year resulted in the best first quarter for company since 1957. Indications are that the improvement in sales and earnings over last year is continuing through the second quarter.

Unaudited net earnings for the first quarter were $15.7 million (50c per share), for a 16% gain over $13.6 million (43c) a year ago. In the corresponding 1957 period, net was $21.6 million (68c).

Sales and production were also higher than last year. Main reason for improved earnings was, however, greater efficiency in operations, out-going President J. R. White told the annual meeting. Other factors were a higher percentage of more valuable products sold this year and a better relationship between product costs and selling prices.

Outlook is that the balance of the year will compare favorably with 1959, FP understands.

Development of new uses and expansion of old ones are expected to keep company in the "growth industry" category for the foreseeable future, Mr. White said.

A rise of nearly 5% in gross national product is forecast for 1960, with a similar rate of increase expected for petroleum demand in Canada. At the same time, the Canadian crude oil industry is expected to increase production at a rate of 9% this year.

"There is no doubt that increasing energy demands on this continent will provide markets for all the petroleum resources that can be developed in Canada," W. O. Twaits, new Imperial president, said at the annual meeting. "The current growth rate . . . continues to support a high level of exploration and development of new resources."

Pointing out that company's output in 1959 represented only 39% of its producing capacity, Mr. Twaits stated: "Imperial has the largest stake in increased crude oil markets and the leverage on earnings from added outlet is substantial."

In 1959 company concluded the final phase of a major refinery rebuilding and expansion program started in 1946. Capital additions were valued at $62.2 million, of which $14.4 million (23%) was spent on manufacturing facilities, compared with $33.5 million (52%) in 1958.

Total capital spending for the year was $91.9 million of which $28.7 million went on exploration. It is expected that this year's program will be on substantially the same scale, although greater emphasis will probably be placed on marketing and distribution facilities.

Company recently announced a $1 million construction program at its Sarnia refinery. The project involves installation of equipment for treatment of furnace fuel oil.

At recent market price of $32⅛, common stock is 5% below UV level ($34), could rise 118% before reaching OV level ($70). Price is 18.6 times 1959 earnings of $1.73 per share. Yield is 3.74% at indicated annual dividend rate of $1.20 per share. Price this year has ranged between a high of $37, a low of $30.

* * *

INTERNATIONAL NICKEL CO. OF CANADA recently raised the caution flag.

After record breaking nickel sales in the first quarter this year, company officials warn that a slowdown in the sales pace is likely later this year.

The booming sales pace actually exceeded company output for the first quarter. However, net profits were down to 85c a share from the 92c in the final quarter last year. (Figures adjusted for stock split). In the first quarter a year ago, net was only 58c a share, but the company was then recovering from the prolonged strike of the late stages of 1958.

Steadily increasing costs are a major factor behind the sagging profit margins. Last year when nickel sales set a record of 317 million lb., profits were fourth highest in company's history at $5.83 on the old shares. Peak was reached in 1956 at $6.47 a share when deliveries totaled 286 million lb. Copper price gyrations are also a significant factor in the profit level.

A partial solution to lower profit margins could come later this year. The U. S. government has offered to negotiate changes in its nickel tariff in the upcoming GATT meetings this fall. Any reduction in the tariff, which now stands at 1¼c a lb., could mean a higher return for our producers.

Alternatively, and considered more likely, the producers may choose to pass any tariff cut on the consumer, in the hope of expanding market potential.

Inco has been particularly active recently in development of new markets to keep pace with expanding productive capacity.

Projects have included promotion of stainless steel consumer goods in co-operation with large department stores and continued research into industrial applications of nickel.

A key plank in Inco's marketing scheme has been to assure consumers that there will be an abundant supply of nickel to satisfy all comers.

In the first quarter period when deliveries were running ahead of production, supplies were augmented by nickel acquired from the U. S. government. These supplies were available as result of the cancellation of company's premium price contracts with the U. S. Inco agreed to take settlement in form of nickel and nickel concentrates from the government to the value of the premium on the contracts cancelled.

But the biggest move in the direction of ensuring supplies is the development of the Thompson project in northern Manitoba. Initial production from the Thompson concentrator is expected later this month.

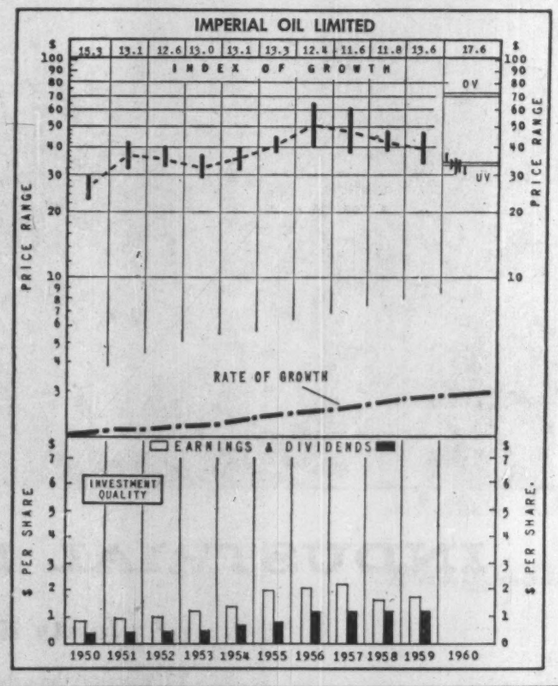
Capacity operations at the plants, including a smelter, will not be reached until next year. By then Inco will add 75 million lb. of nickel a year to its productive capacity, boosting total to about 385 million lb. a year.

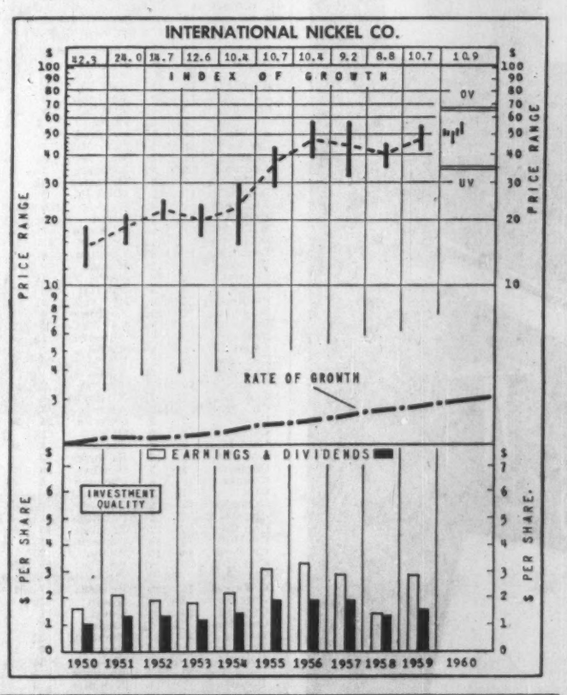
New developments are underway in the Sudbury area too. To provide more ore for its Copper Cliff smelter, Inco is proceeding with mining from the Clarabelle open pit southwest of the Murray mine. Production is scheduled to start in late 1961.

Elsewhere in the camp, an exploration shaft will be sunk 3,000 ft. north of Copper Cliff to permit an underground probe of the Copper Cliff offset ore body.

Earlier this year shareholders approved a stock split on a two-for-one basis. Subsequent to the split, directors increased the annual dividend rate to $1.50 a share on the new stock, equivalent to $3 on the old and ahead from $2.60. The split means that there are now 29,185,618 shares outstanding.

At recent market price of $53⅜, common stock is 53% above UV level ($35), could rise 22% before reaching OV level ($65). Price is 18.3 times 1959 earnings of $2.92 per share (adjusted for 2-for-1 stock split). Yield is 2.81% at indicated annual dividend rate of $1.50 per share. Price this year has ranged between a high of $55⅜, a low of $45⅝.





How to Read Nestor's Special Stock Charts

INDEX OF GROWTH: The rate at which the value of the equity behind the stock is doubling as determined by the growth rate at which it entered the year. A figure of 5.6 for the present year would indicate that at its current growth rate the equity value is doubling every 5.6 years.

PRICE RANGE: The annual high, low and mean price. Monthly ranges for the current year.

UNDERVALUATION AND OVERVALUATION PRICE LEVELS: Shown by the narrow horizontal lines above and below, the stock's price range indicating price at which the particular stock is adjudged as underestimating or overestimating its future rate of growth. A stock showing a fast growth rate will sometimes anticipate growth by two or three years. In this case it may not be so attractive a purchase relatively as some other fast-growing stock that is not anticipating its growth beyond the immediate present. Other factors such as rate of growth and investment quality will also enter into the comparison an investor will want to make.

Without these UV or OV levels a current quotation of, say, 55 or 75 would carry no significance regarding long-range value. The UV/OV levels also permit judgment as between one stock and another. They are not designated points of purchase or sale nor do they attempt to show what will be a stock's bottom or top figures in any given year.

RATE OF GROWTH: The rate as based on Nestor's tests at which the company is showing underlying or long-term growth. This will determine the price trend of the company's common stock over a period of years and in most instances the trend of dividend payments.

**Background and principles behind the selection by Nestor were discussed in a special article in FP Jan. 10, 1953. A limited number of reprints are available on request.*

Royal Bank Promotions in New Staff Changes

P. A. FRECHETTE, assistant manager, Montreal, to be inspector, head office.

F. S. CHESLEY, manager, Clarke's Harbour, N.S., to be manager, Bear River, N.S.

C. D. KELLY, assistant accountant, Windsor, Ont., to be manager, Howard & Hildegarde, Windsor, Ont.

E. U. HIRTIE, manager, Lawrencetown, N.S., to be manager, Maitland, N.S.

J. E. HATCHER, manager, Kinburn, Ont., to be manager, Winchester, Ont.

N. S. CULLEN, accountant, Main & Hastings, Vancouver, to be manager, Victoria Drive & 49th Ave., Vancouver.

E. P. FRASER, manager, Cypress & Stanley, Montreal, to be manager, Smiths Falls, Ont.

J. E. ROY, assistant manager, St. Roch, Que., to be manager, King & Alexander, Sherbrooke, Que.

W. G. TUCKER, St. John's, West End, Nfld., to be manager, Trinity, Nfld.

R. J. H. WILLIAMSON, assistant accountant, Saint John, N.B., to be manager, Canterbury, N.B.

J. J. G. McDONALD, manager, Maitland, N.S., to be manager, Barrington Passage, N.S.

J. G. R. BENARD, manager, King & Alexander, Sherbrooke, Que., to be manager, Notre Dame & George V, Montreal East, Que.

J. P. GIGUERE, head office, to be assistant manager, Montreal.

R. P. LASNIER, head office, to be assistant manager, St. Roch, Que.

V. D. BURK, assistant accountant, Lacombe, Alta., appointed accountant.

J. I. MATTHEWS, assistant accountant, St. John's, Nfld., appointed accountant.

V. E. MORTON, assistant accountant, Craig & Cote, Montreal, to be accountant, Bank & Somerset, Ottawa.

J. A. G. MILLER, assistant accountant, Douglas & Pandora, Victoria, to be accountant, Victoria Drive & 49th Ave., Vancouver.

R. D. WELLS, assistant accountant, High Prairie, Alta., to be accountant, Fort Saskatchewan, Alta.

J. E. PALFREY, Barrington Passage, N.S., retired.

M. A. HULL, Smiths Falls, Ont., retired.

* * *

Nova Scotia:

H. D. SMITH, to be assistant manager, stationery department, general office, Toronto.

G. HESSELINK, assistant accountant, Bancroft, to be accountant, Port Credit, Ont.

M. M. MOORS, assistant accountant, to be accountant, Decarie & Ferrier, Montreal.

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Market Comment

What stocks and bonds are doing and what prominent observers say

More and more, the opinion is growing here that Canadian stock markets will not be able to move buoyantly forward until U. S. bargain hunters switch some of their shopping attention again in this direction.

With a number of long-established Canadian industrial stocks now priced in the 10 to 12 times earnings level this should not be very long, many investment officials think. But it may take another buoyant market phase to push U. S. stocks to more vulnerable levels still, to start the switch.

In the meantime Canadian markets remain virtually featureless. The recently stronger tone in the pulp and papers have run out of steam with the — temporarily at least — firming note in the Canadian dollar.

* * *

PETER W. BELL; Hugh Mackay & Co. (Victoria, B.C.)

Although the American market has recently advanced sharply the Canadian market on the other hand, has so far failed to advance to any extent.

This situation could be due to the recent issues of high coupon industrial provincial bonds which investors in high tax brackets and institutions find most attractive.

Although business conditions are reasonably good, the recent new issues reflect the continuing monetary pressure and it is quite likely that high coupons will be available on new issues for most of 1960. As the return on a great number of Canadian stocks is far from generous at present levels, there does not appear to be any reason for the stock market to be too buoyant at this time.

Because international tension has increased to some extent it is unlikely that there will be a cut in defence spending, and as inventories are relatively low in most cases, and building starts slowly improving, these factors should tend to assist the market to a certain degree.

The high interest rates should benefit the earnings of the bank stocks and the investment operations of insurance companies, while the earnings of finance companies should favorably reflect the current strong demands for credit.

The investor would be wise to still use caution and be discriminative and selective in the purchase of stocks at the present levels.

* * *

GEORGE ARMSTRONG; Canadian Business Service (Toronto)

The Canadian bond market has been firm and the greatest firmness has continued to be seen in the short end of the market, although long term issues were also in steady demand. Money rates have been definitely easier but the New York bond market has been moving sideways — presumably under the expectation of heavy treasury refundings. Nevertheless, the undertone of the bond market is strong.

It is a little difficult to assess the current strength in New York. To some extent it is seasonal; to some extent it is the usual pre-election upswing; to some extent it represents the expectation that the current inventory correction will be followed by a business recovery.

It seems unlikely that it will be followed by a dramatic move into new high ground. At the same time, the market recovery has been faster than we had anticipated.

Since the Canadian market, which was more resistant in the sell-off, has been unexpectedly laggard in the recovery, we can only suggest that we think the Canadian market is still reasonably priced.

We would, therefore, continue to do some selective buying. As a group, the banks look attractive; so do the utilities and the steels; for the very long pull the integrated and western oils represent good value.

* * *

A. J. BENDALL; Jackson, McFadyen Securities (Montreal)

Absence of heavy liquidation in the down-swing of the market during the first half of this year gives the bulls the argument that a primary bear market is not in progress. Against this can be argued that the current rally is simply broadening the top for a later decline of larger proportions.

Technical arguments aside, the investor for income and some future appreciation, is now able to find by careful selection a number of stocks which give a good return on capital. Yields of 4½% and 6% are available and in the case of preferred stocks even more, plus tax credits.

Bond yields are still above the average of the last few years.

Investors should therefore select situations where the record is good and the current yield adequate.

With any shortages of commodities or goods a thing of the past, and with productive capacities capable of handling any foreseeable demand, plus labor costs which are still "tight", it is difficult to see how the leading high grade common stocks already selling at generous times-earnings and times dividend ratios, would be justified in selling at new high ratios in the near future.

A good secondary rise this summer would be an opportunity to liquidate over-priced stocks.

In Canada, the most attractive speculative groups are the gas, pipe line and gas utilities. Long term capital gains in these should be substantial, regardless of the interim market swings.

Unlisted Mines and Oils

By Brokers Dealers Assoc. of Ont.

Approximate quotations, 3.30 p.m., June 13, subject to confirmation and change. An asterisk (*) indicates an increase in price, a dagger (†) a decrease in price.

Abbican	†8	10	Lunecho	*30	31
Abeta	3	4	Magoma	3	5
Abino	†22	25	Main Ok	35	45
Aconic C	23	27	Mall RL	3	4
Do vt	17	20	Manecho	3	4
Advance	3¼	4¼	Marchnt	25	30
Alexand	7¼	8¼	Maree	½	1¼
Am Krk	1¼	2¼	Mr Bird	3	4
Anabar	1	3	Mat Can	5¼	6¼
Anamaq	1	2	Mat Yel	4¼	5¼
Anuwon	1	2	McCuaig	3	4
Arctic	1	2	McFinley	4¼	5¼
Barima	11	13	Miles RL	2	3
Beacon	2	4	Mindus	150	165
Belfast	3¼	5	Mirado	6¼	7¼
B Jk P	1¼	3	Mt Keno	1	2
B Grass	¼	1¼	Mrky F	15	25
Bour C	2	3	Murmac	1¼	2
Bracema	†8	10	Montco	1	3
Bramin	8	12	Nasco	1¼	2¼
Bright	2	3	Nat Nw	*18	20
Brilund	2	4	Nw Aug	2¼	3¼
B McDd	7	10	Nw Insco	5	6
Bruce P	7	9	Nw Met	6	8
Brunnet	3¼	4¼	N Redwd	2¼	4
Camdeck	2	4	N Waico	1	2
Camlaren	2	3	Nicoba	2¼	4
Camray	½	1¼	Nickel L	1	2
C Rd C	10	13	Nipiron	8¼	10
C Al Mt	1¼	2¼	N Offsets	4	6
Cn Fer	115	120	Normar	1¼	2
Carsi	3	5	Oceanic	25	30
Cstlbar	7	9	Oklend	3¼	4¼
Cent Man	3	4	Orofino	9	10
Cnt Hill	3	5	Pacemkr	2	4
Chellew	3	5	Panther	20	30
Clinger	3	4	Parmlee	5	15
Clix	1¼	2¼	Pascalis	16	17
Columbr	1	2	Pax Nw	9	15
Comstock	3	5	Pelanglo	1	2
Con Cop	10	12	Penelop	40	65
Cn Dur	15	18	Pickering	5¼	6¼
Cn Fred	14	18	Picton	2¼	4
Con Hrp	6¼	8¼	Pn Pt	1100	1150
Cordell	1¼	2¼	Pitchvein	†7	8
C Vauze	75	80	Prudent	7	10
Crackst	3	5	Quejo	2¼	4
Craibee	35	38	Quest	1	2
Croydon	1¼	2¼	Raglan	†7	9
Derlac	4	5	Rand Ml	2¼	3
Despina	2¼	3	Redcon	8	10
Destrad	¼	2	Redruth	1¼	5
Dom Ex	21	24	Redbark	¼	1¼
Dunvgn	5	6	Ryholite	¼	1¼
E Lun	1	2	Richgrup	3	4
Echo In	¼	1¼	R Tinto	85	95
Ego	†7	9	Rob RL	*21	24
Evenlode	5	8	Romar	—	2
El Bon	1¼	2¼	Rugged	1¼	2¼
Expl Al	2	4	Russet	3¼	5
Farcroft	1	1¼	Salmit C	3	4
Forty F	50	62	Sheldon	*19¼	21
Gan Cop	2¼	3¼	Shield	26	30
Gateway	2	4	Slad Qu	68	73
Glenburk	5	6	Slate By	2	3
Glencona	¼	1	Sn Drift	15	25
Glen Ech	3	4	S Maryx	4	7
G Harker	6¼	8	Starlight	1¼	3
Gord Lab	¼	1¼	Sunbear	1	2
Goldmaq	2¼	4	Thornert	1	3
Goldyke	1	3	Tower	1	3
Gov Gld	2	3	Tresdor	10	11
Halmon	6	8	U Ridge	6	7
Hot Min	3	4	Ungav C	2	4
Hornflt	5¼	6¼	U Prin	†190	200
Hubert L	¼	6	Viking	*13	15
Hucamp	10	12	Wadge	7¼	10
Hud Un	3	5	Watson	9	11
Independ	5¼	7	Wesley	4	5
Ind Mt	11	13	Westfld	16	19
Inmnt C	†13¼	15	West RL	3¼	4¼
Jamaican	6	8	W Wasa	5¼	6¼
Jean L	4	6	Y David	12¼	14
Jerome	1¼	2¼	**OILS**		
KB Mng	5	6	B C Oil	1100	1300
Kamlac	10	13	Do rts	600	700
Kenoa	5	6	C Delhi	4¼	4¾
Kenda P	¼	1¼	GS Grs	†14	17
Lndona	2	3	Harvest	†33	38
Laronge	1	2	N Surp	80	85
Larum	8¼	9¼	O Smoky	½	1¼
Lassie	9	11	Paige P	3	—
L Expan	*9	10	P Dover	15	20
Lk Renzy	3	5	Phoenix	25	35

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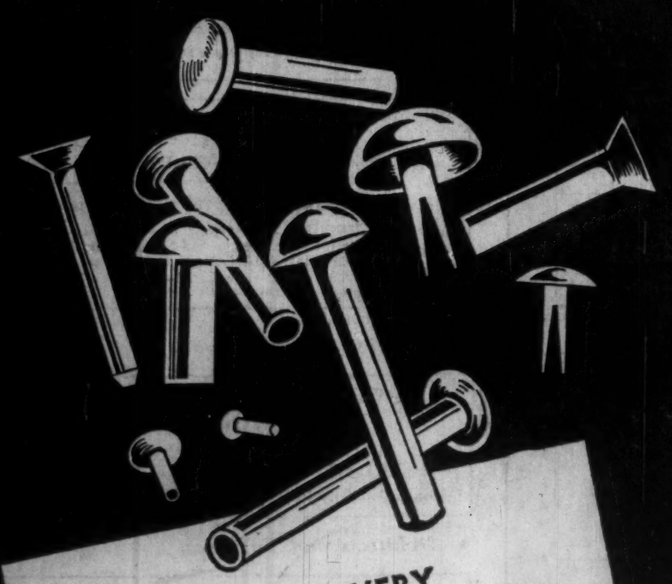

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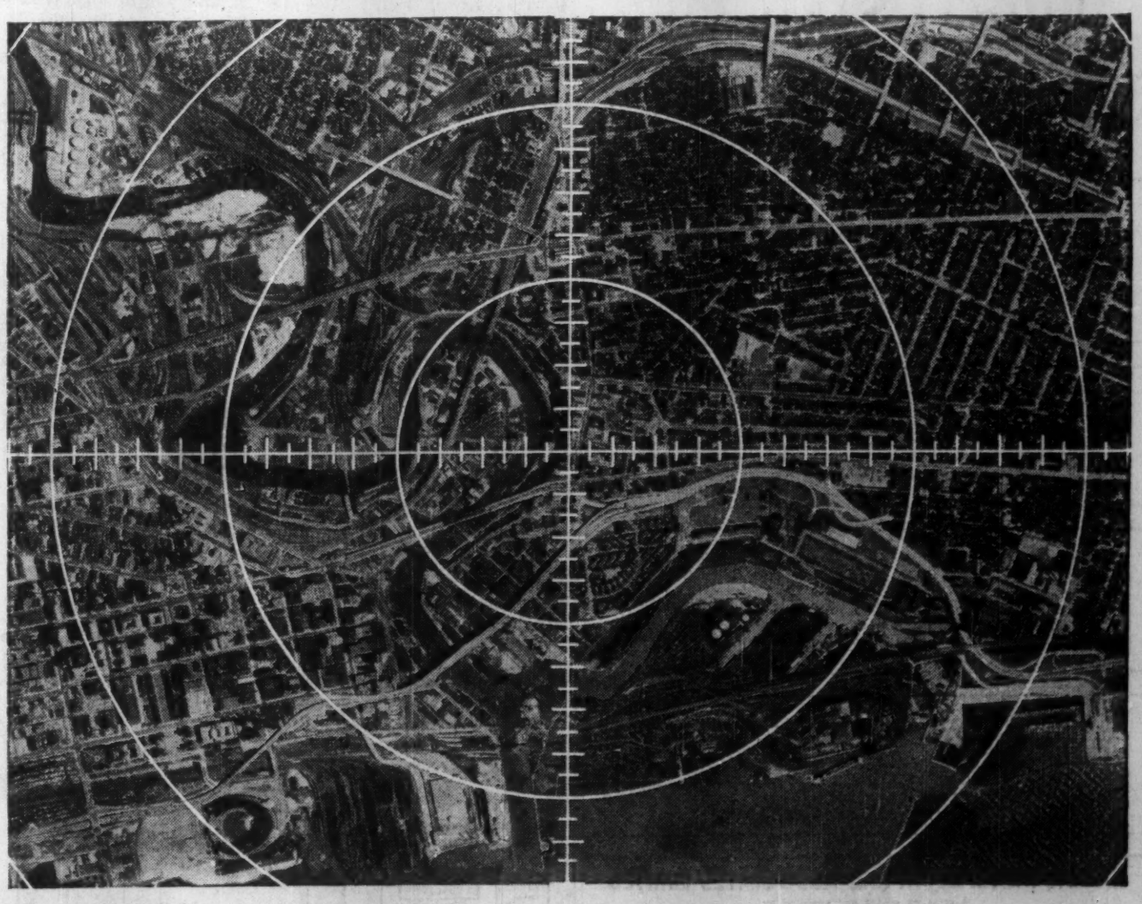

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McKEE ENGINEERING AND CONSTRUCTION SERVICES

New Highs and Lows

In the week ended June 11, 30 new highs and 49 new lows were registered by general stocks listed on Canadian stock exchanges. In the mining group there were 11 new highs and 58 new lows. Western oils had three new highs, 27 new lows.

GENERAL

NEW HIGHS — 1960

Argus 'B' pref.	Gt. Winn. Gas rts.
Bell Telephone	Hardee Farms pfd.
Brazilian Tr.	Ind. Accept.
B.C. Elec. 4% pf.	4½% pfd.
Do. 5% pf.	Do. 4½% pf.
B. C. Tele.	$2.50 p.
Building Prod.	Loblaw Comp. pfd.
Burns & Co.	Loblaw Groc. 1st pfd. 'A'
Cdn. Breweries	MacLaren Pr.
Cdn. Food Prod.	Moore Corp.
4½% pfd.	National Tr.
Cdn. Ind. Gas	Premier Sti.
Coll. Terminal pfd.	Que. Telephone 5½% c. shs.
Consumers Gas	Rolland Pap. 'A'
5½% pf.	Union Gas 5½% pfd.
Coronation Mtge.	United Corp. 5% pfd.
Dow Brew.	
Gatineau Pwr. 5% pf.	

NEW LOWS — 1960

Acadia Atlan. 5% pf.	Can. Floor 'B'
Albt. Dist.	Can. Iron
Analogue	Cdn. Bronze
Aute Fabric 'B'	Cdn. Drawn Sti.
Avalon Tele.	Cdn. Int. I. Tr.
Beatty Bros.	Cdn. West. Gas ord.
Bridge & Tank N.	Cdn. Westinghouse
Br. Am. Bk. Notes	Comb. Enter.
Burlington Sti.	Cosmos Imp.
Can. & Dom. Sugar	Dom. Electro
Dom. Oilcloth	F. L. Robertson
Famous Players	St. Law. Cem. 'A'
Fruehauf Tr.	Sher.-Wms.
Goodyear Tires	Stafford Foods
Gt. W. Saddlery	Stan. St. Sti.
Inland Nat. Gas warr.	Switson
Interior Brew. 'B'	Toronto Iron
Jefferson Lake	Twin City
Lafarge Cem. 'A'	United Principal
Lakeland Nat. G.	Venezuelan
Mailman Corp. pfd.	Viau New
Paul S. S.	West Copper
Prairie Pipe	Do. warr.
Quebec Nat. Gas	West Plywood 'B'
Do. units	

MINING

NEW HIGHS — 1960

Can. Tungsten	Geco
Cleveland	Latin Am.
Cons. Marbenor	Placer Div.
Craigmont	San Antonio
Forty Four	Vanguard
Frobisher debs.	

NEW LOWS — 1960

Abacus	Atlin Ruffner
Amer. Neph.	Barymin
Anglo-Huronian	Bateman
Anglo Rouyn	Bevcon
Ansil	Boymar
	Bunker Hill
Cadamet	Gunnar warr.
Cdn. Asteria	Head of the Lakes
Candore	Hugh Pam
Cons. Beta	Jonsmith
Cons. Discovery	Kenville
Cons. Fenimore	Lake Dufault
Cons. Pershcourt	MacDonald
DeCoursey 'B'	Manitou Barvue
East Malartic	Maralge
Eldrich	Mattagami
Geo. Scientific	Mining Corp.
Neolon	Pronto
N. Ainsworth	Prospectors
N. Goldvue	Que. Labrador
N. Imperial	Que. Manitou
Noranda	Quenston
Normetal	Red Crest
Northgate	Ryenor
North Rankin	Stanrock
Oboska	Tack Hughes
Paudash	Upper Canada
Pickle Crow	Werner Lake
Winchester	Yukon Cons.
Y'ka. Bear	

OILS

NEW HIGHS — 1960

Jupiter	Royalite 5¼% pf.
Pender	

NEW LOWS — 1960

Alta. Pac. Cons.	Bailey-Sel. 5% pf.
Amer. Leduc	Calalta
Asamera	Cdn. Devon.
Cdn. Exp. Gas	North Cent.
Commercial	Nuco
Cons. East Crest	Pamoil
Cons. Mic Mac	Peace River
Futurity	Permo Gas pfd.
Globe	Place Gas
Landa	Ranger
Leduc Cal.	Submarine
New Concord	Titan
New Richfield	Turner Valley
North Cdn.	

Mutual Funds

	Divd. pd. cents	Bid	Ask.
All-Can. C. Fd.	15.128(30.563)	6.81	7.40
All-Can. Div. Fd.	12(32)	5.31	5.77
American Growth	3(18)	8.14	8.87
Assoc. Investors	17(33½)	7.79	7.87
Can. Invest. Fund	16(38)	8.63	9.47
Canafund	70(125)	34.50	36.23
Champion Mut. Fund	8(21)	5.25	5.77
C'wealth Inte.	24(29)	8.06	8.66
Corporate Inv.	16(42½)	8.55	9.34
Diversified Inc. B	5.4(10.8)	3.75	4.10
Dom. Equity	33(52)	14.55	14.85
Dom. Comp. Fund	16(38)	8.75	9.13
Do. nonres.	16(38)	8.73	9.08
Dominion Funds	16(38)	8.38	8.72
First Oil & Gas		3.38	3.69
Group Accum.		5.25	5.74
Grouped Inc.	5.45(23.7)	3.55	3.88
Growth Oil & Gas		6.13	6.44
Invest. Growth	(10.5)	5.85	6.33
Investors Mutual	17(33)	10.88	11.77
Leverage Fund	10(10)	6.42	7.05
Mut. Acc. F.	5.95(23.87)	7.09	7.75
Mutual Bond		6.02	6.30
Mutual Income	12.09(26.16)	4.68	5.11
North American	6(120)	8.25	8.97
Regent Fund Ltd.	3(9)	4.32	4.78
Sav. & Int. Mut.	9(18)	4.97	5.43
Sup'vised Amer.	3(12)	7.19	7.26
Sup'vised Executive	(1955)	37.49	...
Sup'vised Executive	(1956)	30.74	...
Sup'vised Executive	(1957)	5.27	...
Sup'vised Executive	(1958)	5.56	5.61
Sup'vised Gr'th Fund	(3.5)	1.59	1.61
Sup'vised Inc. Fund	4(17)	3.88	3.92
T.V. Electr'n	12‡(95a)	8.24	8.98
Timed Invest.	6(25)	5.40	5.83
Trans-Can. A	55.8(95.2)	25.60	...
Do. B	44(91.1)	27.00	...
Do. C	8.2(18)	5.45	5.95
United Accum. Fund	16(24)	14.04	15.26

aPaid or payable in 1960, total paid in 1959 in parentheses.

bOf which 62½ (U.S.) cap. gains dist. in 1959.

cOf which 4c (U.S.) was paid following 2-for-1 stk. split.

‡Including initial.

Government Bonds

June 14, 1960

(Supplied by Investment Dealers' Assoc. of Canada)

%	Due	Bid	Asked
Govt. of Canada Bonds:			
3	Perpetual ...	66‡	67‡
2‡	June 1967/68.	78‡	88‡
3‡	Jan. 1975/78.	83	84
3‡	Mar. 1996/98.	77‡	78‡
3	Dec. 1960 ...	99‡	100‡
3	May 1961 ...	99‡	99‡
3‡	May 1970 ...	89‡	90‡
3‡	Oct. 1979 ...	78‡	79‡
3	Dec. 1961 ...	98‡	99
3‡	Sept. 1965 ...	94‡	95‡
4‡	Sept. 1972 ...	91‡	92‡
4‡	Sept. 1983 ...	90‡	91‡
4	Jan. 1963 ...	99‡	99‡
5‡	Oct. 1960 ...	101‡	101‡
5‡	Oct. 1962 ...	103‡	103‡
3‡	June 1974/76.	80‡	81‡
5‡	Apr. 1963 ...	103‡	103‡
5‡	Apr. 1969 ...	102‡	102‡
Cdn. Nat. Railways:			
3	Jan. 1961/66.	91‡	92‡
2‡	Feb. 1961/63.	96‡	96‡
2‡	Jan. 1964/67.	89	90
3‡	Feb. 1972/74.	85‡	86‡
4	Feb. 1981 ...	84	85
5‡	Dec. 1964 ...	102‡	103‡
5‡	Jan. 1985 ...	104‡	105‡
Int. Bank of Reconstruct. & Development			
3‡	Apr. 1965 ...	91‡	93‡
3‡	June 1969 ...	86	87‡
C'wealth of Australia:			
4	Nov. 1970	85‡	87‡
Prov. Govt. Bonds			
Alberta Tel. Gtd.:			
4‡	July 1976/78.	85‡	86
British Columbia:			
3	June 1964 ...	91	93
Pac. Gt. East. Rly. Gtd.:			
4‡	Dec. 1987 ...	85	87
Ontario Hydro:			
4‡	Nov. 1964/67.	94	95
5	Apr. 1974/77.	93‡	95‡
6	Feb. 1978/80.	103‡	104‡
6	Feb. 1970 ...	103‡	104‡
Quebec:			
4‡	Jan. 1974/77.	92	94
New Brunswick:			
4‡	Oct. 1968/71.	90‡	92‡
5	Oct. 1974/77.	93	95
Ontario:			
4‡	Dec. 1962/63.	97‡	98‡
3	Nov. 1963/65.	91	92
5	Jan. 1977/79.	93‡	95‡
6	Nov. 1969 ...	103‡	104‡
6	Nov. 1977/79.	103‡	104‡
Man. Hydro:			
5	July 1975/77.	91‡	93‡
Manitoba:			
3	Oct. 1965 ...	88‡	90‡
Nova Scotia:			
4‡	Nov. 1974/76.	86‡	89
3‡	Oct. 1962/65.	91‡	93‡
Newfoundland:			
4‡	July 1962/64.	95	96‡
5‡	Feb. 1977/79.	91‡	93‡
Quebec Hydro Commission:			
5	Nov. 1980/82.	93‡	95‡
Saskatchewan:			
4‡	Nov. 1974/76.	86‡	89
3‡	Oct. 1962/65.	91‡	93‡

Record of Financing

Sales by Municipalities, Provincial and Dominion Governments, Offerings of Corporations and Securities.

DOMINION

Government of Canada Treasury Bills —Due Sept. 2, 1960, and Dec. 2, 1960, $120,000,000. Issued June 3, 1936. Sold at $99.278 to yield 2.92% and $98.410 to yield 3.24%.

MUNICIPAL

City of Montreal, Que. — 5¾% debentures, due June 1, 1980 and June 15, 1980, $28,000,000. Issued May 26, 1960. Offered at $97.70 (U.S.) by a syndicate of dealers headed by Smith, Barney & Co., the Dominion Securities Corpn. and including A. E. Ames & Co. Inc.

City of Quebec, Que. — 3%, 5½% and 5¾% debentures, due June 1, 1961-80, $1,588,700. Issued May 25, 1960. Sold at $89.07 to A. E. Ames & Co. Ltd., Dominion Securities Corpn. Ltd., Royal Bank of Canada, Canadian Bank of Commerce, J. C. Bouiet, Ltee, Desjardins Couture, Inc., Banque Provinciale du Canada and Toronto-Dominion Bank.

County of St. John, N.B. — 5¾% debentures, due June 1, 1961-80, $750,000. Issued May 5, 1960. Sold at $98.026 to Nesbitt, Thomson & Co. Ltd., W. C. Pitfield & Co. Ltd., Royal Securities Corpn. Ltd., The Toronto-Dominion Bank, Gairdner Son & Co. Ltd., Dawson, Hannaford Ltd., Greenshields & Co. Inc. and Winslow & Winslow Ltd.

Township of Trafalgar, Ontario — 6½% debentures, due June 30, 1961-80, $795,000. Issued May 7, 1960. Bought privately by Mills, Spence & Co. Ltd. and Bell, Gouinlock & Co. Ltd.

City of Fredericton, N.B. — 5¾% debentures, due June 1, 1961-80, $392,000. Issued May 11, 1960. Sold at $99.06 to Nesbitt, Thomson & Co. Ltd.

City of Charlesbourg, Que. — 5½% and 6% debentures, due June 1, 1961-80, $462,000. Issued May 24, 1960. Sold at 96.60 to Clement, Guimont Inc., Gairdner, Son & Co. Ltd., J. T. Gendron, Inc., Lagueux & Desrochers, Ltee, Dawson, Hannaford Ltd. and Jacques Legare & Cie Ltee.

Municipality of St.-Joseph-de-Coleraine, Que. — 6% debentures, due June 1, 1961-70, $230,000. Issued May 24, 1960. Sold at $96.53 to Placements Kennebec, Inc.

School Commission for Mun. of St. Foy, Que. — 5½% and 6% debentures, due May 1, 1961-70, $1,300,000. Issued May 24, 1960. Sold at $97.63 to Banque Provinciale du Canada, Jacques Legare & Cie. Ltee, Florido Matteau & Fils, Credit Anglo-Francais, Ltee, Durocher, Rodrigue & Cie, Ltee, Placements Kennebec, Inc., Credit Quebec, Inc. and Belanger Inc.

Town of Lockeport, N.S. — 6% 1-11 year debentures, $48,000. Issued June 3, 1960. Sold at $99.277 to Cornell Macgillivray Ltd.

Protestant School Commission for Mun. of Pointe-Claire & Beaconsfield, Que. — 5½% and 6% debentures, due June 1, 1961-65-80, $655,000. Issued $96.511 to A. E. Ames & Co. Ltd., Wood, Gundy & Co. Ltd., Royal Bank of Canada, Nesbitt, Thomson & Co. Ltd., Gairdner, Son & Co. Ltd., Bank of Montreal, Dominion Securities Corpn. Ltd. and L. G. Beaubien & Cie, Ltee.

Village of Beamsville, Ont. — 6½% debentures, due Aug. 1, 1961-80, $80,000. Issued May 30, 1960. Sold at $98.767 to Dawson, Hannaford & Co. Ltd. and James Richardson & Sons.

Town of Cowansville, Que. — 5½% debentures, due June 1, 1961-80, $85,000. Issued May 30, 1960. Sold at $95.356 to A. E. Ames & Co. Ltd. and Bank of Montreal.

Town of Pointe-Gatineau, Que. — 5½% and 6% debentures, due June 1, 1961-80, $97,000. Issued May 30, 1960. Sold at $96.01 to Dominion Securities Corpn. Ltd.

Mun. of St. Bruno, Que. — 5½% debentures, due May 1, 1961-70, $32,000. Issued May 30, 1960. Sold at $97.182 to L. G. Beaubien & Co. Ltd.

Town of Laval-des-Rapides, Que. — 6% debentures, due June 1, 1961-70, $602,500. Issued May 31, 1960. Sold at $96.56 to Banque Provinciale du Canada, Credit-Quebec, Inc., Durocher, Rodrigue & Co. Ltd., Belanger, Inc., Credit Anglo-Francais, Ltee, Morgan, Ostiguy & Hudon, Ltd., Gaston Laurent, Inc. and Florido Matteau & Fils.

Village of Richelieu, Que. — 5½% debentures, due May 1, 1961-70, $70,000. Issued May 30, 1960. Sold at $96.56 to Morgan, Ostiguy & Hudon Ltee.

Town of Ste-Agathe-des-Monts, Que. — 5½% and 6% debentures, due May 1, 1961-70-75-80, $136,000. Issued May 31, 1960. Sold at $95.95 to Societe de Placements, Inc., Veillet, Langlois & Courtemanche, Inc.

School Commission for Mun. of St. Hubert, Que. — 5½% debentures, due June 1, 1961-70. $246,000. Issued May 31, 1960. Sold at $96.54 to Grenier, Ruel & Co. Inc., La Corporation de Prets de Quebec, J. E. Laflamme, Ltd., Garneau, Boulanger, Ltd. and Oscar Dube & Co. Inc.

Stratford Roman Catholic Separate School Board, Ont. — 6¼% debentures, due Jan. 15, 1961-80, $60,000. Issued May 31, 1960. Sold at $98.72 to R. A. Daly & Co. Ltd.

County of Norfolk, Ont. — 6% debentures, due June 15, 1961-80, $500,000. Issued June 3, 1960. Sold at $100.63 to Bankers Bond Corpn. Ltd., Nesbitt, Thomson & Co. Ltd. and Burns Bros. & Denton Ltd.

Township of Richmond, B.C. — 6% debentures, due July 2, 1961-90, $550,000. Issued June 6, 1960. Sold at $100.90 to Harris & Partners Ltd., Burns Bros. & Denton Ltd. and Bank of Nova Scotia.

Canadian Shopping Centres Ltd. — 7% sinking fund debentures, series "A", due April 1, 1980, $500,000. Issued March 22, 1960. Offered in units of one share "A" debentures and common shares $500.00 per unit by Eastern Securities Co. Ltd.

St. Lawrence Corporation Ltd. — 6¼% sinking fund debentures, series "A", to mature June 15, 1980, $15,000,000. Dated June 15, 1960. Offered at $100.00 and accrued interest by Dominion Securities Corpn. Ltd., W. C. Pitfield & Co., Ltd., Nesbitt, Thomson & Co. Ltd., Wood, Gundy & Co. Ltd., McLeod, Young, Weir & Co. Ltd., A. E. Ames & Co. Ltd., Royal Securities Corpn. Ltd., Greenshields & Co. Inc., Gairdner & Co. Ltd., H. C. Flood & Co. Ltd., L. G. Beaubien & Co. Ltd., Burns Bros. & Denton Ltd., Midland Securities Corpn. Ltd., Dominick Corporation of Canada, Rene-T. Leclerc Inc., Cochran, Murray & Co. Ltd., Equitable Securities Canada Ltd., Ross, Knowles & Co. Ltd., Bartlett, Cayley & Co. Ltd., Collier, Norris & Quinlan Ltd., R. A. Daly & Co. Ltd., Eastern Securities Co. Ltd., Fry & Co. Ltd., MacTier & Co. Ltd., Matthews & Co. Ltd., Mead & Co. Ltd., Tanner Bros. Ltd. and Houston, Willoughby & Co. Ltd.

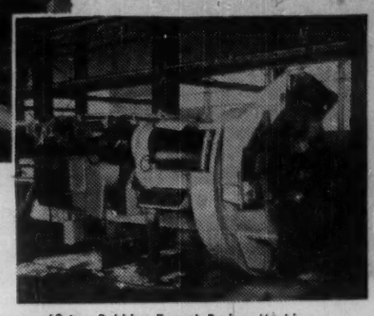
Foreign Exchange Rates

Noon Value In Canada
Week Ended June 14, 1960

	U.S. $	U.K. £
Wed.	.98 9/32	2.75 2/8
Thurs.	.98 7/32	2.75 1/8
Fri.	.98 7/32	2.75 1/8
Mon.	.98 6/32	2.75
Tues.	.98 12/32	2.75 5/8
Ave.	.98 41/160	2.75 9/40

U.S. rate reported by Bank of Canada.
U.K. bid rate reported by Toronto-Dominion Bank.

CUSTOM MANUFACTURE



60-ton Robbins Tunnel Boring Machine for sewage tunnel project.

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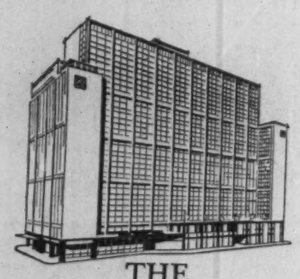

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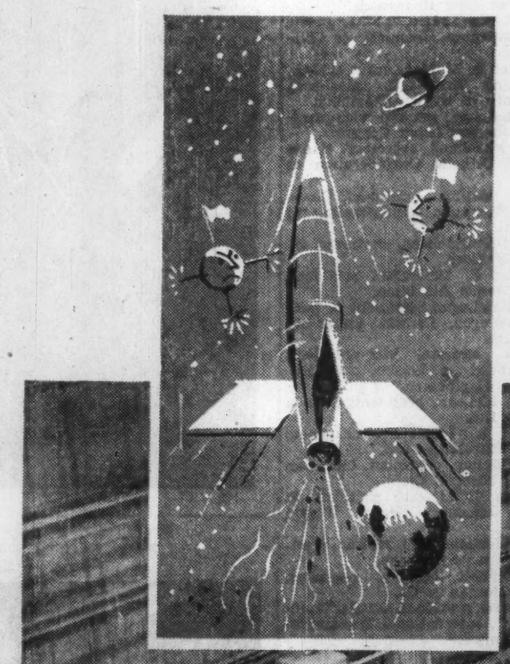

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RDO-60-2N

Prince Philip's Study Committee

Montreal has been named by Prince Philip as the probable site of the first plenary meetings of the 1962 Commonwealth Study Conference.

His Royal Highness, as president of the conference, said in Toronto that the conference would probably begin early in May, when the university year ends, and continue for about three weeks.

Final plenary meetings will probably take place at the University of British Columbia, Vancouver.

Chairman of the second conference (first was held at Oxford in 1956) will be former Governor - General Vincent Massey.

Vice-chairman will be president W. M. V. Ash of **Shell Oil Co. of Canada.**

Here are Canadian members of the Conference Council:

D. W. Ambridge, president, Abitibi Power & Paper Co.

A. H. Balch, Dominion legislative representative, Brotherhood of Railroad Trainmen.

W. J. Bennett, vice-president, Iron Ore Co. of Canada.

Paul Bienvenu, president, Catelli Food Products Ltd.

C. T. Bissell, president, University of Toronto.

Samuel Bronfman, president, Distillers Corporation-Seagrams Ltd.

Robert A. Brown, Jr., president, Home Oil Co.

J. E. Brownlee, president, United Grain Growers Ltd.

F. W. Bruce, president, Aluminum Co. of Canada.

John W. Bruce, general organizer, United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry.

W. N. Burnell, first vice-president, International Brotherhood of Pulp, Sulphite and Paper Mill Workers.

George Burt, general vice-president, Canadian Labor Congress.

Hon. J. V. Clyne, chairman, MacMillan, Bloedel & Powell River Ltd.

Andrew Cooper, executive board member, United Brotherhood of Carpenters and Joiners of America.

Hugh Crombie, vice-president & treasurer, Dominion Engineering Works Ltd.

N. R. Crump, president, Canadian Pacific Railway.

J. A. D'Aoust, vice-president, United Papermakers and Paperworkers.

William Dodge, executive vice-president, Canadian Labor Congress.

F. W. Dowling, director, District 8, United Packinghouse Workers of America.

Raymond Dupuis, president and managing director, Dupuis Freres, Ltee.

Thomas W. Eadie, president, Bell Telephone Co.

A. L. Fairley, Jr., president, Dominion Steel & Coal Corp.

Marcel Faribault, president & general manager, General Trust of Canada.

Philip S. Fisher, president, Southam Co.

R. M. Fowler, president, Canadian Pulp & Paper Association.

J. A. Fuller, president and chairman, Shawinigan Water & Power Co.

Donald Gordon, president, Canadian National Railways.

G. Blair Gordon, president, Dominion Textile Co.

A. E. Grauer, president, British Columbia Power Corp.

Frank H. Hall, general vice-president, Canadian Labor Congress.

W. N. Hall, president, Dominion Tar & Chemical Co.

H. H. Hannam, president, Canadian Federation of Agriculture.

J. E. Harrington, president, Anglin-Norcross Corp.

Eric L. Harvie, chairman, Western Chemicals Ltd.

Sydney Hermant, president, Imperial Optical Co.

Oliver Hodges, Canadian director, United Glass & Ceramic Workers of North America.

David S. Holbrook, president, Algoma Steel Corp.

J. William Horsey, chairman, Salada-Shirriff-Horsey Ltd.

L. Hynes, vice-president, Canadian Industries Ltd.

F. Cyril James, principal, McGill University.

William Jenoves, general vice-president, Canadian Labor Congress.

Claude Jodoin, president, Canadian Labor Congress.

Vernon E. Johnson, president, Canadian International Paper Co.

J. H. Mowbray Jones, vice-president & director, Bowaters Mersey Paper Co.

William S. Kirkpatrick, president, Consolidated Mining & Smelting Co. of Canada.

Stanley Knowles, executive vice-president, Canadian Labor Congress.

Herbert H. Lank, president, Du Pont of Canada Ltd.

Rt. Rev. Irnée Lussier, University of Montreal.

Donald MacDonald, secretary-treasurer, Canadian Labor Congress.

Colin B. Mackay, president, University of New Brunswick.

M. W. MacKenzie, C.M.G., president, Canadian Chemical & Cellulose Co.

Norman A. M. MacKenzie, C.M.G., M.M. and Bar, Q.C., president, University of British Columbia.

W. Mahoney, general vice-president, Canadian Labor Congress.

Jean Marchand, secretary, Canadian & Catholic Confederation of Labor.

Roger Mathieu, president, Canadian & Catholic Confederation of Labor.

M. W. McCutcheon, chairman, St. Lawrence Corp.

Gordon R. McGregor, president, Trans-Canada Air Lines.

T. R. McLagan, president & general manager, Canada Steamship Lines Ltd.

J. G. McLean, vice-president, Brotherhood of Locomotive Firemen and Enginemen.

W. F. McLean, president, Canada Packers Ltd.

Frank M. McMahon, chairman, Pacific Petroleums Ltd.

I. F. McRae, chairman, Canadian General Electric Co.

George C. Metcalf, president & general manager, George Weston Ltd.

Hon. Hartland deM. Molson, president, Molson's Brewery.

J. Bartlett Morgan, president, Henry Morgan & Co.

J. Morris, president, District Council No. 2. International Woodworkers of America.

C. J. Morrow, president & treasurer, Ocean Fisheries Ltd.

J. G. Notman, president, Canadair Ltd.

Ralph D. Parker, vice-president, International Nickel Co. of Canada.

Col. W. Eric Phillips, chairman, Massey-Ferguson Ltd.

Hon. Calvert C. Pratt, chairman, Steers Ltd.

Roger Provost, vice-president, Canadian Labor Congress.

Jean Raymond, president, Alphonse Raymond Ltée.

C. Reimer, Canadian director of the Oil, Chemical & Atomic Workers' International Union.

James A. Richardson, vice-president, James Richardson & Sons Ltd.

Lucien G. Rolland, president, Rolland Paper Co.

Frederick G. Rutley, chairman, Foundation Co. of Canada.

R. M. Sale, president, Ford Motor of Canada.

Austin A. Scales, Island Fertilizers Ltd.

George P. Schollie, general vice-president, International Association of Machinists.

Bernard Shane, vice-president, International Ladies' Garment Workers' Union.

G. Harry Sheppard, president, International Business Machines Co.

Joseph A. Simard, chairman, Marine Industries Ltd.

W. J. Smith, president, Canadian Brotherhood of Railway Transport & General Workers.

Sam Steinberg, president, Steinberg's Ltd.

E. P. Taylor, president, Argus Corp.

C. C. Thackray, president, Dominion Rubber Co.

A. A. Thornbrough, president, Massey-Ferguson Ltd.

R. W. Todgham, president, Chrysler Corp. of Canada Ltd.

E. H. Walker, president, General Motors of Canada Ltd.

Hon. Clarence Wallace, president, Burrard Dry Dock Co.

J. H. Wesson, president, Saskatchewan Wheat Pool.

George L. Wilcox, president, Canadian Westinghouse Co.

W. E. Williams, president, Procter & Gamble Co. of Canada.

Francis G. Winspear, partner, Winspear, Hamilton, Anderson & Co.

Hon. Robert H. Winters, president, Rio Tinto Mining Co. of Canada.

Edward C. Wood, president, Imperial Tobacco Co. of Canada.

STARTING PLANT

British Titan Products (Canada) Ltd., has named **Dobush & Stewart** as architect on its $15 million titanium oxide pigment plant at Tracy, near Sorel, Que. **Huza-Thibault** has been named mechanical and electrical engineering consultant and **deStein & Associates** will be structural engineering firm on the project. Prime contractor is **Stone & Webster Canada Ltd.** All are Montreal firms. Site work will start shortly and the project is scheduled for completion by the summer of 1962.

industry

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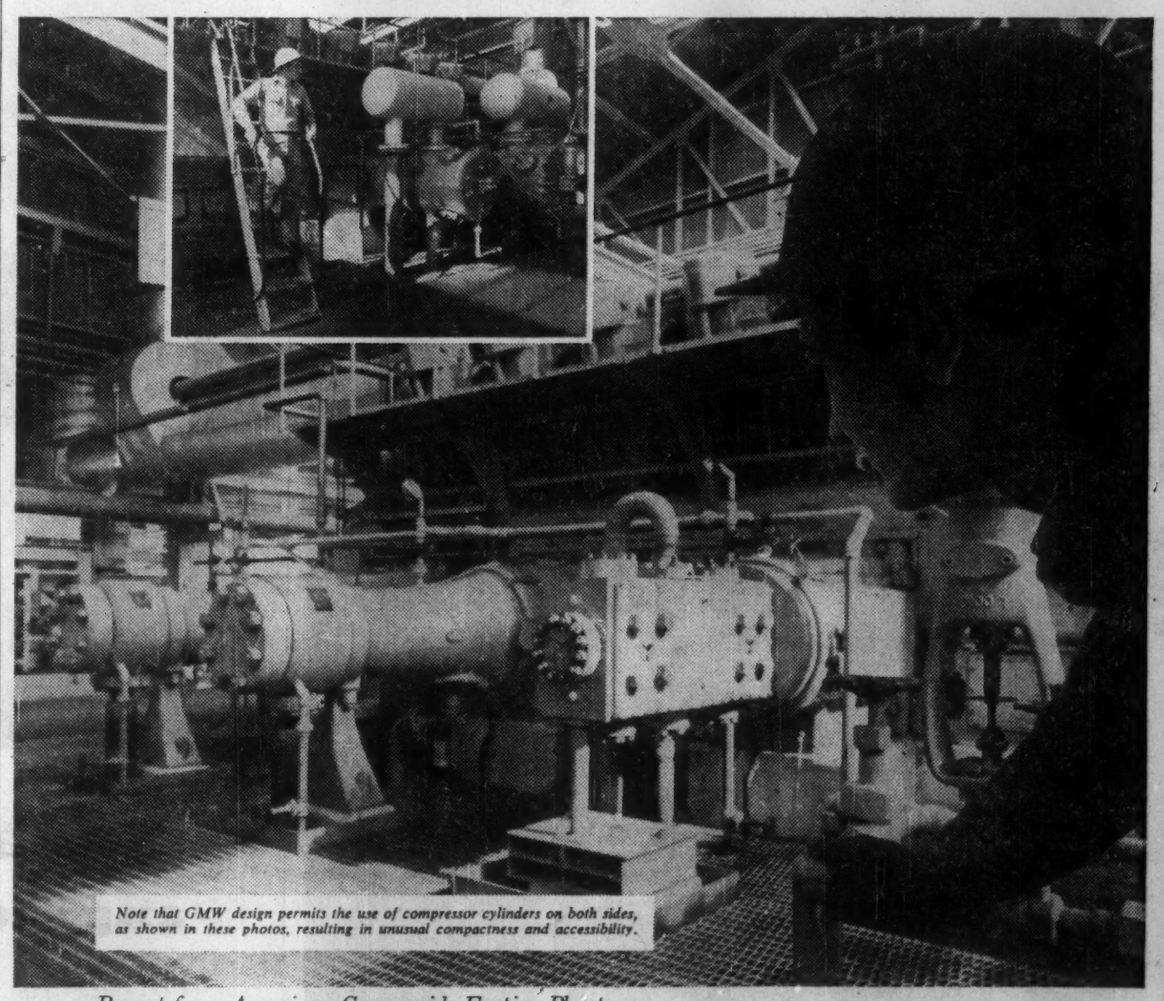

Note that GMW design permits the use of compressor cylinders on both sides, as shown in these photos, resulting in unusual compactness and accessibility.

Report from American Cyanamid, Fortier Plant...

How Cooper-Bessemer gas engine compressors boost synthesis gas for ammonia to 5000 psi

These photos show both sides of one of the two Cooper-Bessemer 2500 hp GMW gas engine compressors at the Fortier Plant of American Cyanamid Company, Avondale, Louisiana. In the production of anhydrous ammonia, these 4-stage units compress 6000 cfm of synthesis gas from 60 psi to a discharge of 5000 psi. The lower view shows the high pressure cylinders; that in the inset shows the low pressure side. The four stages of compression from 60 psi are (1) to 225 psi, (2) to 670 psi, (3) to 1500 psi, (4) to 5000 psi.

The two units have been operating since 1954, 24 hours a day, 340 days a year.

The anhydrous ammonia produced at the Fortier Plant is used by American Cyanamid in the manufacture of acrylonitrile and is sold to fertilizer plants and other chemical companies.

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ANNOUNCEMENT

PITMAN-MOORE APPOINTMENT

TOM DONAT

The election of Tom Donat to the Board of Directors, Pitman-Moore of Canada Limited, has been announced by J. L. McKee, president of Allied Laboratories, Inc. Mr. Donat is vice-president, production, and has been with the company eight years.

STATIONER EXPANDS

W. J. Gage Ltd., Toronto, has bought **Brantford Stationers Ltd.**, Brantford, Ont. Founded in 1917, the Brantford firm will continue to operate as an independent company. G. H. Love, president of Gage, becomes president of Brantford Stationers and R. M. Humble, treasurer and director of the Brantford firm, becomes general manager.

City Smog Filth Spreads to Farms

This urban evil may have invaded the green countryside farther than scientists believed . . .

Damage from city smog extends much further into the countryside than scientists believed likely a few years ago.

A study of air pollution in southern Ontario by three experts backs up this new appraisal of smog damage.

They speculate that "tobacco weather fleck", causing an average of $1 million damage annually to southern Ontario's tobacco crop, may be caused by the smoke and fumes spilled from industrial plants and motor vehicles in cities 60 to 100 mi. away.

The three scientists: Dr. H. B. Marshall, B. C. Newbury and W. A. Petrie.

The three were employed by the Ontario Research Foundation when the study was launched in the summer of 1958 under the sponsorship of **Imperial Tobacco Co.**, the federal Department of Agriculture and the Meteorological Branch of the Department of Transport.

Newbury is now with **Research Development & Surveys Associates Ltd.**, Toronto, and Petrie with **O'Cedar of Canada Ltd.**, Stratford, Ont.

In a paper delivered at a Cincinnati meeting of the Air Pollution Control Association, the three say that the damaging substances in the air immediately north of Lake Erie may be the final decay of a "smog system" trapped over Lake Erie.

The nearby major cities are Hamilton, Detroit, Windsor and Cleveland, each at least 60 mi. away from the afflicted area.

The standard combustion pollutants — smoke, sulphur dioxide, for instance — do not appear to travel the distance to the tobacco fields.

Measurements with instruments in the fields during the summers of 1958 and 1959 indicated this.

Most of the time these combustion pollutants were not detectable.

However, the scientists suggest, an area of permanent inversion over Lake Erie or a land-lake breeze system may trap these pollutants for 24 hr. or more, preventing dispersion.

In this time a photochemical reaction between the substances can take place and the end products may be carried to the farmers' fields.

The scientists have discovered a high concentration of aldehydes in the atmosphere in the tobacco area.

They don't know whether the aldehydes, which could be an end product, or other substances, cause the tobacco fleck.

Measurements are difficult because of the extremely small amounts of pollutants present—less than one part per million.

The Canadian scientists note their pollution data so far is "meagre and inconclusive".

The study is continuing this summer under the sponsorship of the Department of National Health and Welfare and will be carried further by Dr. Morris Katz, consultant to the department.

They remain confident that air pollution is the bug-bear for two reasons:

- **Possible biological causes** for the fleck have been investigated by the Department of Agriculture and no cause found.
- **Similar fleck** in California tobacco has been traced to air pollution.

The Ontario scientists have yet to pin down the damaging chemical in southern Ontario, but suspect the aldehydes.

The chief hope for reducing the damage is the development of tobacco plants that are resistant to weather fleck.

Plant scientists are breeding such strains at Delhi and Harrow in Ontario.

Carpet Firm Net Down 27%

Net profit of **Harding Carpets Ltd.**, Brantford, Ont., for six months ended April 30 (first half of fiscal year), was $250,896 ($1 per share), down 26.9% from $343,270 ($1.44) in the same period last year.

Operating profit amounted to $616,317 ($843,317 last year).

Profit margins, while lower, are satisfactory, President C. Malim Harding says. Additional start up expenses were incurred in the tufting plant earlier in the year. It is now contributing to profits.

Yardage sales were higher in the latest period, but dollar volume was slightly below last year. This reflects not only a drop in prices but a swing to lower priced merchandise.

Continuing problem of imports may be relieved to some extent by the decrease in the Canadian dollar premium, Mr. Harding states.

Japanese imports are the highest ever and carpets have not yet been included in the products on which voluntary quotas have been set.

Planned addition of piece dyeing equipment should add materially to Harding's range of products, company says.

Working capital was $3.8 million at April 30 ($4.1 million a year ago). Earned surplus amounted to $3.5 million.

Where Tax Money Goes: Unemployment Insurance

(CONTINUED FROM P. 36)

without a dependent was $16.20. Now, it's $27.00. The corresponding figures for people with dependents are $21 and $36.

Parliament has tinkered regularly with seasonal benefits, i.e., benefits which can be drawn by people who haven't made enough contributions to qualify for ordinary benefits.

The following calculation gives a rough idea of the costs of the Parliamentary changes:

In 1950, 2.63 million insured workers drew $94.5 million in benefits, or $35.17 each.

By 1959, Parliamentary changes in the Unemployment Insurance Act, plus population growth, had pushed the insured population up to 4.11 million.

Suppose that the Parliamentary changes hadn't taken place. Presumably, then, the insured population in 1959 would have borne the same relationship to the number of people in Canada with jobs that it bore in 1950.

The insured population then becomes 3.09 million (instead of the actual 4.11 million). If each of these 3.09 million people had received benefits at the 1950 rate, total drawings on the fund would have been $108.7 million, or 27% of the $405.6 million actually drawn from the fund in 1959.

You can't say that the 1959-61 government contributions to the fund would have been only 27% of their actual total ($97 million) if Parliament hadn't changed the Unemployment Insurance Act. You can't say this because the calculation takes **no** account of:

- **Differences** in economic conditions in 1950 and 1959. The pressures on the fund were different.
- **The fact that** rising wage levels automatically push workers into higher benefit and contributions classes whether the schedules are changed or not.

But you can certainly conclude that Parliamentary changes in the Unemployment Insurance Act added greatly to government contributions to the fund in 1959-61.

It's hard to imagine how the government contributions could have been more than half as large as they were, had the changes not taken place.

The assumption used by FP several times so far in this series —that a government agency's spending ought to be related to the thing it serves — can be used to justify the Parliamentary changes.

- **In the last 10 years,** the number of people with jobs in Canada has increased by a cumulative annual 1.8%. At the same time, GNP has increased by a cumulative annual 6.3% (these figures include price changes).
- **Government contributions** to the Unemployment Insurance Fund increased by a cumulative 6.3%.

If you compare growth of job-holders, you find that the former increased far more quickly than the latter.

But if you relate growth of government contributions to UIF (and presumably the fund benefits most of the workers who contribute to UIF), you find that the two are increasing at precisely the same rate. On the assumption above, the

At a cumulative annual 5.4%, total spending by the Unemployment Insurance Commission is increasing much more slowly than GNP at 6.3%.

spending is justified.

ANNOUNCEMENT

ST. REGIS-CONSOLIDATED PACKAGING LIMITED

K. ROSS HUGHES, C.A.

J. STUART GLASS, P.Eng.

St. Regis-Consolidated Packaging Limited announces the following appointments: K. Ross Hughes is appointed Comptroller. Mr. Hughes is a graduate of McGill University, a member of the Institute of Chartered Accountants of Quebec and has wide experience in the pulp and paper industry.

J. Stuart Glass is appointed to the newly created position of Director of Engineering and will be responsible for all engineering in the company pertaining to manufacturing and high-speed filling and weighing equipment. Mr. Glass is a graduate of Cambridge University and a member of the Professional Engineers of Ontario.

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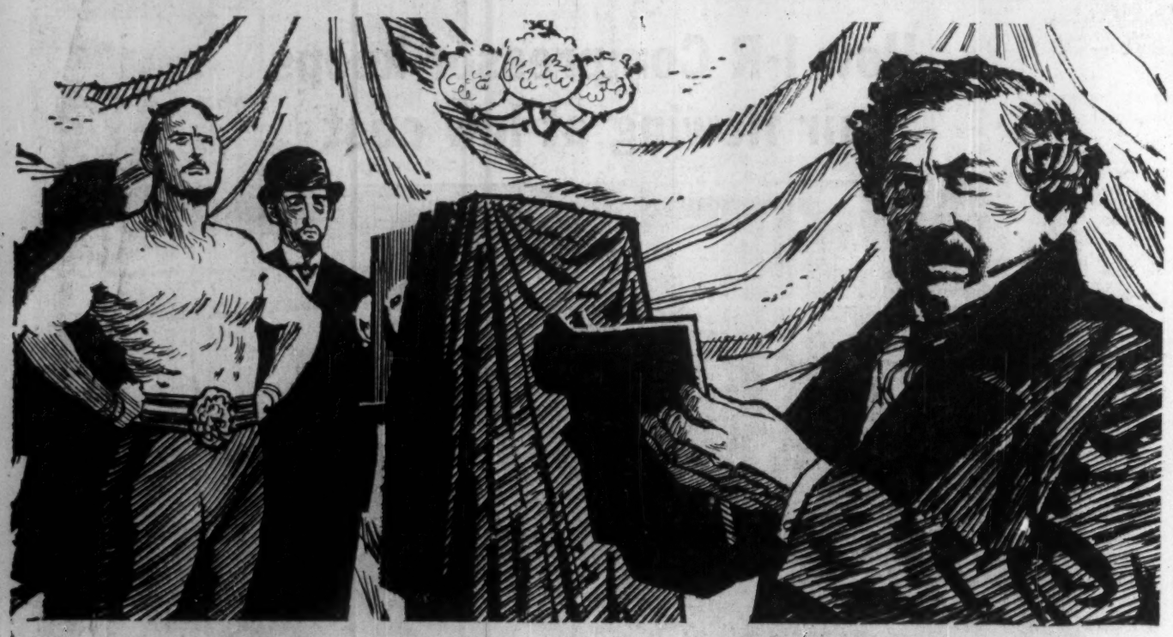
WHO THINK
OF TOMORROW
PRACTICE
MODERATION
TODAY

The House of Seagram

DISTILLERS SINCE 1857



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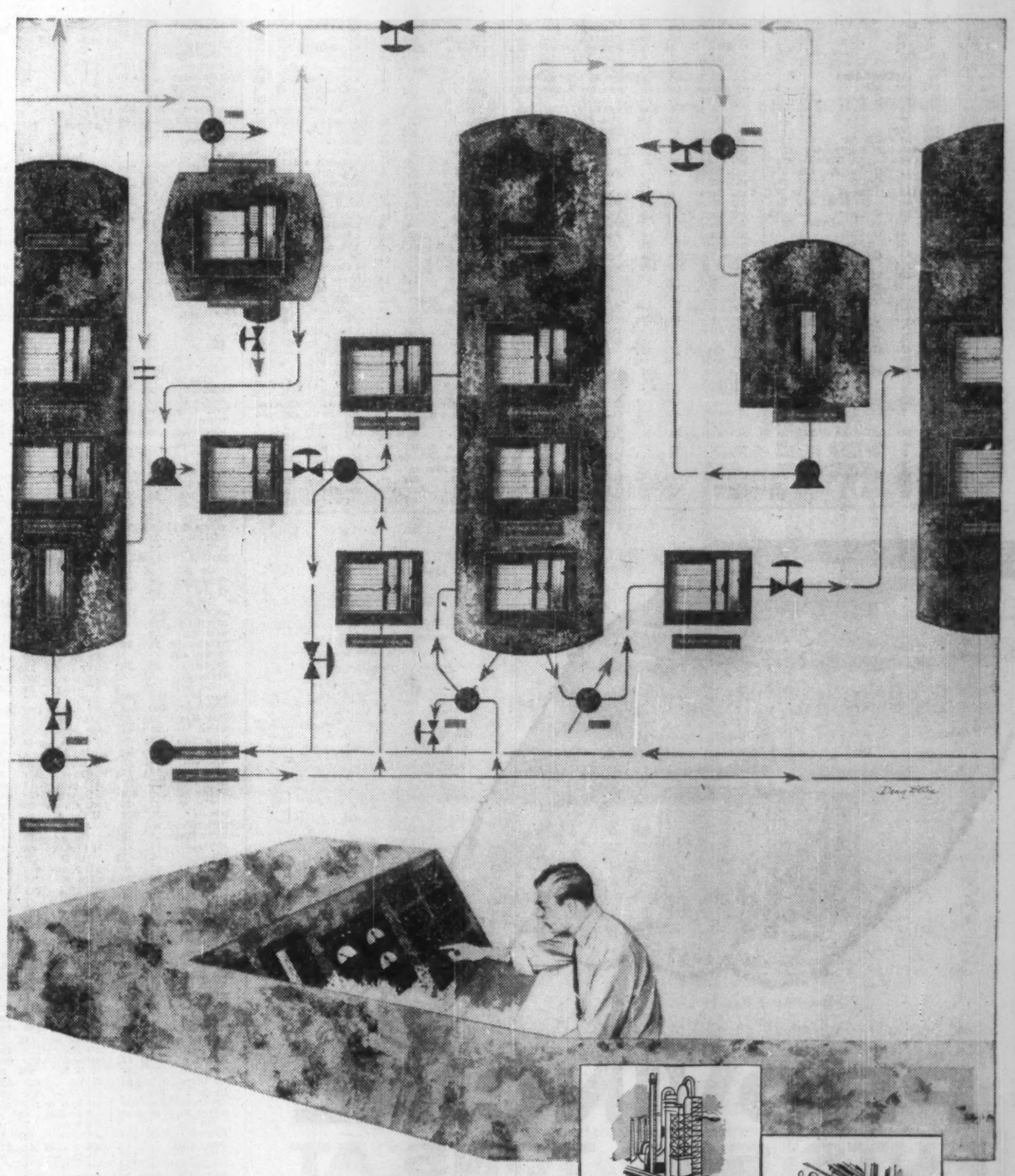

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June 14, 1960

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xAbacus	23	25
Abitibi	40¾	40¾
Do p	22¾	22¾
Ac-Atl	9½	10½
Do A	19¼	19½
Do p	85½	87
xAc Ur	7	8
xAcme	15	16
Adml	16¾	16¾
xAdvoc	350	355
Ag-S	17¾	..
xAgnico	72	73
xAkaitc	36	40
xAlba	4	5
xAlta D	215	220
xDo vt	190	195
xDo w	76	82
Alt Gas	19¾	19¾
xAP Con	36	40
Algom	980	1025
Alg C	18	18¾
Do p	54½	56
xDo w	500	545
Alb Gas p	101½	102
Do w	475	480
Algma	32	33
Algon	8	8½
Do p	18¼	19½
xDo w	210	..
xAll R	23	28
xAlmin	156	165
Alumi	32	32½
Do 1 p	20¾	21½
Do 2 p	43¼	43½
xA-Lar	18½	23
xA Rare	7½	8
xAm L	7½	9
xA Nep	44	47
xAmur	220	..
Analog	465	475
xDo w	200	225
xAnch	7	10
Ang Am	485	..
Ang Am	485	..
Ang-Cdn		
Tel	49	51
A Plp p	50½	51
xAng Hu	675	685
xAng R	15	18
xAnsl	8	8½
Anthes A	30	30½
Do B	..	33
Do B p	87	95
xArc w	4½	5
xArea	70	75
Argus	28¾	29
Do 240 p	56	71
Do 250 p	45½	47½
xArjon	6½	8
xAsama	50	55
Ash T	7¾	8
Do A	92	95
Do B	9½	9¾
Ash A	11½	..
Do B	12¾	13
xA Arc	35	37
Atl A	14¼	..
Do 1 p	15½	20½
xAtl C C	125	130
Atlas	20	20¾
xAt Yk	5	7
xAt-Ruf	7	9
xAumac	5½	6
xAumaq	6½	7
xAunor	240	250
Aut El N	8½	8¾
Aut F A	6½	8½
xDo B	260	330
xBly SA	565	575
Do p	16	16¾
Do 5¾	18¾	19
xBanff	97	100
xBnkno	21½	22
xBnkfld	8½	9
Bk Mtl	53½	53¾
Bk NS	59¾	60
Do rts	450	455
Ba Cndien	53½	54
Barb-E	80	..
xBrclna	420	..
xBarnat	142	144
xBary E	42	44
xBase M	12	13
xBaska	6	7½
xBata	4	4½
Ba In	5	5½
Bath A	42	43
Do B	31	31½
xB-Duq	15	18
Beatty	5½	5¾
xBeav L	7	9
B Lum	22	22¾
Do A	16	17½
Do p	25	27
xBelch	53	54
Bell	45½	45¼
xBellet	18	20
xBthim	65	68
xBeven	10	11
xBibis	8	9
xBicrft	48	53
xBidcop	8½	9
Bilt	6¾	7½
Do p	12¾	13½
xBl Bay	9½	12
xBordul	4½	5
xBouzn	49	50
Bow p	46	47
Do 5½ p	48½	49½
Bow Mer p	47½	48

	Bid	Ask
Bowat	8¼	8¾
Bowes	30	34
xBoymr	4½	5½
xBrlrn	495	500
xBralsa	40	45
xBrazil	475	480
Do p	79	..
Br T n	6¼	6½
Do p	41¾	44½
Bright	39	45
Do p	20½	25
xBritalt	206	209
BA Oil	26¾	27
BCE 4 p	73¾	75½
Do 4¼ p	39	41
Do 4½ p	42¼	..
Do 4¾ p	85	86
Do 5 p	46½	46¾
Do 5½ p	51	51½
BC For	12½	12¾
BC P A	14¾	14½
Do B	14½	14¾
BC Pow	32¾	32½
BC Phone	44¾	45
Brck C	10¾	11½
Brooke p	17½	18½
xBr Reef	40	41
Brown	14¾	14¾
Bruck A	7¾	8
xDo B	250	275
xBrnsk	365	370
xBufad	7	7½
xBuf A	178	183
xBuf RL	6½	7
Bld Prd	33¾	34½
Bull A	5¾	6
Do B	410	490
xBunk H	6	8
Burlton	15½	16
Burns	13½	13¾
Burr A	6½	6½
xCable	10	13
xCdmet	10½	11
xCalalta	40	41
Cal Ed	15¾	15¾
Cal Pow	18	18½
Do 5 p	96	97
xCalv C	325	390
xCalvert	45	46
xC Chib	615	620
C R L	10¾	11
Canada		
xC Brd	365	385
Do B	50	56
C Cem	27¾	28
Do p	26¾	27
CCC St	15½	15½
C Foil	19	20¾
Do A	20½	21
C Fnd	7½	9½
Do A	15	25
Cl Fnd	17¾	18½
Do 4½	75	77
C Mach	10½	15
C Malt	55	56
Do p	23½	23¾
xC O L	103	104
xDo w	14	15
C P A	45½	47½
Do B	45	47½
C Perm	48¾	49½
C Saf 4 p	85½	87
xCSO w	21½	27
xCS Pet	295	310
CSL	42¼	43
Do p	11½	..
xC Tung	161	165
C Wre B	7½	7½
Canadian		
xC Ast	4½	5
C Avia	18½	19¾
C Baks	5½	6½
C Bnk C	52½	53
C Br	37¾	37¾
CB Al	11	11½
xCBA w	460	475
xDo Bw	425	480
C Can A	13½	13¾
C Cel	19¾	20½
Do $1	16½	17
Do $175	30½	31
C Chem	6¼	6½
xC Chief	100	101
C Coll	8¾	8¾
xDo p	73	76
C Cvertrs	350	400
Do B	475	..
xC Curt	155	160
xC Dev	225	230
C Drn S	15½	16
Do p	11	11
C Drdg	13½	14½
xC Dyno	37	41
xC E Gas	162	165
C Fbks A	10	10
Do B	5¾	6½
xCF Pr	400	425
Do A	10	10
Do p	64	70
CGE	750	1180
CG S A	14	15
Do B	16	19
xC High	26	29
xC Home	71	80
xC Hsky	540	550
xDo w	205	210
C Hyd C	10½	10¾
C I Ma	6	6½
Do A	11½	11¾

	Bid	Ask
CIL	12¾	13¾
Do p	70	76
C I Gas	390	395
C Intl Pwr	15½	15½
Do p	43½	43½
C Loco	6½	8
xC Mal	47	50
xC N In	11	12
xC NW	29	31½
C Oil	21	21½
Do p	141½	144
Do 5	91¾	95
Do 4	76	77
CPR	25¼	25¾
C Pet p	9¾	10½
C Salt	35	38
xC Sup	940	950
xC Thor	4	5
C Tire	175¾	180
C Ut p	85	88
Do 4½	72	..
C Vick	13¾	15
C Wal A	28	38
Do B	29½	33
CWN Gas	16	16½
Do p	14½	15¾
Do 5½	19½	19½
C West	39	40½
xC Will	51	75
xCandor	11	12½
xCanEr	85	86
xCapt	7½	8½
xCarib	80	84
Cass	12½	12¾
xCayzr	28	33
xC Del	475	480
xC Pat	105	108
xC Porc	9½	11½
xCar O	77	85
Chart-Tr	59½	63
C-Gal	23¾	24
xChesk	2½	4
xChest	33	34
xChib J	31½	34
xChib-K	9	10
xChi M	50	54
xChim	55	56
xChrm	455	465
Chrys	..	52
C Bar	7	..
Do A	7½	..
xCoch W	284	285
Co-D	17	20
Do A	16	17
Cshutt	14¾	14¾
Coghlin	350	..
xCoin L	12½	14
Coll	13¾	..
Do p	14	17½
xCol Cel	410	425
Com E	8	8½
xCo Met	22	24
xCmoil	115	..
xCom P	223	250
Conduit	11½	12½
Conf L	136	155
Do O	165	175
xConia	43	45
xCniaur	56	59
xCKey	13½	18
Consolidated		
C Bak	8	8¾
xC Bell	4	4½
xC B G	6	8
xC Call	5	7½
xC C C	3	5
xC Disc	305	310
xC Dra	28½	30
xC E Cr	35	37
xC Fen	16	20
C Fire	5½	7
xC Gill	5	6
xCG Ar	32½	34
xC Hall	49	49½
xC Mrbn	39	41
xC Mrcs	66	70
xC M M	190	199
C M S	18¾	19½
xC Mogul	87	94
xC Morr	20	21
xC Mos	153	154
xC Neg	17	18
xC Nich	4	5
xC Nor	32	34
xC Pers	8	10
xC Que	23½	29
xC Red P	5	6
xC Reg	6	7
xC San	5½	6
xC Sud	32	34
Cons Text	230	250
xC W P	340	345
C Gas	38¾	39
Do A	103½	..
Do B	102½	..
Cons Glass	24	24¾
Con C	39¾	39½
xCnwst	5½	5½
Cop Cl	5½	5½
xC Cor	16	16½
xCop-M	8½	9½
xCprnd	125	128
Corb vt	17¾	18
Do B	16½	17
Ccmos	10¾	11½
xCoulee	32½	33½
xCourn	6½	7½
xCowic	28	30
xCraig	190	190
xCrgmt	500	505
Crain RL	20½	20½
C Telef	10¾	10¾
xCree w	355	360
xCrst	9	12

	Bid	Ask
xCrsbk	120	125
Do p	13½	17
xDo w	6	16
xCroi	6	10
Cr Cork	48¾	..
Cr Tr	25½	25½
Cr Zellars		
(Cda)	18½	20
Cr Zell	45½	46
xCrowp	6½	7
Crow	16½	18
Crush	7¾	7¾
Do p	103½	104
xCusco	5	6½
xDaer	9½	10½
xD'Ara	22	23
xDe C	8	9½
xDeer H	24½	25
xD'Eld	7½	9
xDelte	45½	49
xDenis	880	895
xDev P	58	60
D Seag	29½	29¾
Dome	17½	17½
xD Pete	680	690
Dominion		
D Ang	500	..
Do p	85	88¾
D Brge	18¾	18¾
xD Coal p	300	350
Dom Corst	16	17½
D Dair	11	11¾
Do p	25	..
D Elec	6¾	7
xDo w	360	425
D Fab	9	12
Do 2 p	20¾	21½
D Fdry	41½	41¾
Do p	98	99
D Ins	275	..
D Mag	6¾	8¾
D Scot	30½	30½
Do p	42	48
Dosco	13½	13¾
D Strs	54½	54¾
D Tar	14½	14¾
Do p	18¾	19½
D Tex	9½	9¾
Do p	125	131
xDonal	5	6
Donohue	15½	16
Dover	11½	11¾
Do p	9	10
Dow	45½	50
Dup Fre. A	6½	6¾
xDuvan	10	11
xDuvex	5	6
xDynam	113	114
xE Am	5½	8
East Koot	9	10
xE Mal	140	142
xE Sull	152	156
Easy p	15½	18
Econ I	..	37½
Ed Ma	27½	29
Eddy	..	63¾
Do A	59	62
xElder	102	103
xEldr	13	14
xElectr C	98	..
Electrolux	19½	20
xEl Sol	6	6½
Emco	10	10½
Em Life	56½	58
En & Heat	8	9
Do B	4	5
Eq Life	53½	58
Erie A	6	7½
xDo B	100	275
xEurka	20	22
Falcon	31¾	31¾
Fam Pla	19½	19½
Fan F	15½	16½
xFrdy	68	73
xFargo	295	300
xFwest	7½	8
xFatima	47	48
Fed Fire	36½	..
Fed Gr	44½	45
Do p	26¾	27
Fibre	6	7½
Do p	5½	6½
Fitting	6½	8
Do A	8½	9¾
xFleet	51	53
Fwood	9¾	10½
Ford US	68½	..
Ford C	140	141½
Found	9¾	9¾
xFrnc	4	5
Fraser	26½	26½
Frei p	89¾	..
xFr P p	450	490
xFrbshr	170	171
Do db	88½	89½
Frosst	14¾	15½
xFrue	480	500
xGaitwin	5½	6½
Gatin	35½	35¾
Do 5 p	99½	104
Do 5½	103	104
Geco	17½	17¾
G Bak	7	7½
G Dev	13½	13½
G Dyn	43	44
G Elec	93½	93½
GMC	43¾	44½
xGP Dr	76	..
xDo A	75	90
GP M A	6¾	6½
Do B	7½	8
GSW	10½	11
Do p	85½	88
xGenex	8	9½

	Bid	Ask
xGeo Sc	63	70
xGt Mas	21½	23
Giant	920	935
xGlacier	16	18
xGlenn	5	6
xGldale	15	17½
xGF Mn	20	21
xGldry	17	19
Gdy	135	145
Do p	43	46
G Mac A	6¾	6½
Do B	7½	8
Gftn A	14½	15
xGranby	550	..
Gr Toy	42	..
xGrdroy	10	11
xGduc	110	120
GL P	41	41½
GL Pow	24	25
Do p	23¾	24½
Dow	575	695
GN G	5¾	6
Do p	38	40
Do 280	..	41
xDo w	160	175
xDo Bw	160	175
xGr Plns	925	935
xGW C A	450	465
xDo B	300	325
xGr W	..	390
G Wpg G	9½	9¾
Gr Wpg vt	8¾	8¾
xDo 56w	275	325
xDo 58w	250	275
xGrning	325	375
Greyhnd	10¾	11½
xGridoil	105	200
Guar T	26¾	26¾
xGulch	5½	6
xGulf L	4½	5
xGunn	775	780
xDo w	7	9
Gurney	9½	10
Do p	27	29½
xGwilm	5	6
Hahn	10	11
Do 1 p	15	16
xHallnr	150	190
H Cot	16½	17
Do p	81	..
Handy		
Andy	13	14¾
Hardee	11¾	11½
Do p	104½	106½
H Carp	10¾	..
xHd Rck	12	13
xHar-M	6	7
Hartz A	9½	15
xHasaga	14½	18
xH of L	6	6½
xHdway	28½	30
xHeath	4	4½
xHees	..	350
xHendsh	42	..
Do p	90½	94
xHigh-B	151	170
H D	53½	55
Hi-T	7¾	8½
Hold A	6½	7½
xDo B	250	495
Holling	22½	22¾
Holt R	15½	15½
xHo O A	800	815
xDo B	755	770
xHorne	345	360
H Smit	38½	38¾
Do p	38½	40
xHowey	240	247
xHoyle	350	365
Hud B	48¾	49
xHoyle	350	365
Hud B	48¾	49
HB O G	990	10
xH-Pam	6	8½
Hu O A	10¾	11
Do B	10	14½
Do p	25½	..
Hur Er	53	56
xHydra	26½	28
Imp B	59½	60
I Flo	36	37
I In A	9¾	10
I Inv P	20	20
Do p	21½	23½
Imp L	78	80
Imp O	31¾	31½
I Tob	11¾	12
Do p	5¾	6
I Acc	39¾	40
Do 450 p	86	87
Do 225 p	42½	44
Do 275 p	50¾	..
Do w	14¾	14¾
Inger A	5½	6½
Inglis	465	490
Ingr B	8	10
Do p	12	12½
Inl C p	18½	18½
xIn G	400	410
In Gp	14	14
xDo w	..	95
xInspir	30	32
Int Bro	12½	13½
Do p	22	22½
xI Moly	6½	8
I Nickel n	53¾	53¾
I Pete	43	52
I Util	34	35
Do p	40½	41
Intprov	5¾	5¾
xDo 59w	46	80
Int Pl	55½	56½
xIP Stl	430	440
Inv Syn	30½	37

	Bid	Ask
Do A	26	26½
xIrish	98	100
xIrn B	280	285
Iroq G p	13¾	14½
xIso	57	59
xJ Wal	30	31
xJacobus	108	109
Jam Pub	28½	29
Jam P.S.	103	..
xJaye	15	18
Jeff	5¾	5¾
xJellico	8	9
xJburk	7½	9
xJock C	220	225
Do p	9½	9¾
Do B p	8½	8½
xDo w	30	32
Jons-M	60¾	61½
xJoliet	21	22
xJonsm	9	11
xJows	27½	29½
xJump P	14	16
xJupit	176	180
Kel D A	6	6½
xDo w	300	315
Kelvin	7	7
xKenvil	4½	5
Ker Ad	10¾	11
xKil	226	238
xDo w	30	32½
xKirk M	26	28
xKirk T	7	8
xKopan	33	35
Labatt	26¾	26¾
Labdor	19	19¾
Lfge	7½	7¾
Do A	9	9½
Do w	90	125
xL Cin	61	66
xL Duf	45	47
xLkind	190	200
xL Ling	6	7
xL Osu	13	20
xL Shor	375	380
xL Was	30	32
L Wds p	130½	135
xLa L	330	345
xLamq	320	325
Lamb L	32	32¾
xLanda	..	224
xLangis	59	60
xLat Am	63	64
L Sec	13½	13¾
Laur A	12½	14
L J A	19½	20
Do B	26½	30
xLeitch	150	153
xLenc	5	7
Lewis Bro	10½	11½
xLexndn	2	2½
xLIL	160	162
LobCo A	26¾	26¾
xDo w	590	640
Do B	26½	26¾
Do p	42	44½
LobG 1 p	28½	29½
Do 2 p	46	..
Do B p	29½	30
LobGro	92	120
xLocana	94	98
Loeb	7	8
xL Hos	100	110
xDo A	350	380
xLIP	11	11½
xL Point	58	59
xLorado	33	35½
xDo w	5	5½
xLouvi	3½	5
Lr St Lawr	30	30½
Lown	24½	26½
xLyndh	10	11½
xLynx	6½	7
xMacas	255	260
xMacdon	17	19
xMacfie	4½	5
Mack Strct	..	9
Do p	94	..
xMacL	100	101
Mac L A	23	23½
MB and		
PR	16½	16½
xMadsn	282	287
xMagnt	6	6½
Magnum	15	..
Maher	26	27
Mail p	..	88
Mailman	20	25
xMajtrn	2	2½
xMalart	80	86
xMan U	4	5
M Su p	90½	94
xMan Bar	50	60
M L G	28	30
M L M	13¾	14
Do p	88	95
xMralgo	9	10
xMarcn	8	10
xMargld	6	7½
xMari	86	87
xMrtin	41	42
Mass-F	9¾	9¾
Do p	98¾	103
Do 5½	99	99½
xMatat	6	7
xMatta	485	505
xMaxw	300	300
xMaybrn	8	9
xMayfr	88	100
McB p	12¾	15
McC	26	30
McInt	24½	24¾
xMKen	20	23
xMMar	5	6½
xMWat	35	37

	Bid	Ask
xMedal	145	154
xMent	17	18
xMerril	68	70
xMeta	6½	7½
M LP	18¾	19
Do p	12½	13
xMidcon	37½	39
Mid P	16½	18
xMidr	53	55
xMidW	150	155
xMill C	20	21
xMillik	80	84
xMilt B	240	245
xMinda	5	8
Min Cp	10½	10¾
xMin Or	6	7½
Mitchll Ro	11¾	12½
Do cl B	6	6½
M C A	14	14½
Mols A	24½	25
Do B	24	24¾
Do p	40½	..
Moly	..	55½
M Kn	8½	8¾
Do p	67	83
M Inv	45	50
xMoneta	63	66
M Loco	15½	15¾
Mtl Tr	43	44
Moore	46	46½
Do A	2208	..
Do B	3312	..
Morgan Co	27	28
Do 4¾%p	86½	..
xMt Wrt	56	57
xMulti	25	29
xMurr	67	68
xNama	10	11
National		
Nat Dr	14¾	15
Do p	14¾	15
xN Exp	3½	4
N Groc	20	24
Do p	26	27
xN Hos A	350	..
xDo B	225	250
N Lead	91¾	92½
xN Pet	167	175
N St C	13½	13¾
Nat Tr	50½	52
xNealon	4	5
xNello	9	12
Neon	14¾	15½
xNes L	7½	10
New		
xN Alg	4	5
xN Ath	35	36
xN Bid	6	7
xN Cal	33	35
xN Conc	4	6
xN Cont	22	23
xN Dav	10½	11
xN Del	9½	11
xN Dick	257	260
xN Gvue	4	5
xN Harri	6½	8
xN Hos	72	74
xN Jas	5	5½
xN Kel	8	8½
xNlund	15	16
xN Man	26	27
xN Myla	41	42
xNnor	4½	5
xN Rou	6	8
xN Sen	3	4
xN Sup	54	55
xN Taku	12½	18
Nia W	11	12
Do B	11½	11¾
xNick M	33½	35
xN Rim	40	43
xNipis	77	80
xNisto	4	5½
xNor-Ac	13	14
Noran	37	37½
xNorbeau	37½	40
xNorgold	5½	6
xNorlar	20	20½
xNrmet	275	280
xNorpax	8	10
xNorsyn	6	7
xNorcal	7	8
North		
xNCO	203	212
xDo w	42½	49½
Do p	20	22
xN Cold	103	105
xN Gate	36	38
xN Gldt	24½	26
xN Rk	68	70
xNthsp	77	80
xDo A p	27½	29
N Star	34	..
Do A	19	..
Do p	47½	47½
xDo w 57	355	360
Northern		
xN Can	110	119
No NG	13	13½
NQ P	24¾	25¾
Do 1 p	44	46¾
xNor Ph	340	360
xDo w	75	93
xNthld	13½	15
Nthld U	16	16
NW U p	70	73
xNorval	8½	9
xN Bcage	35	85
NS Lt &		
Pwr	13½	14
xNudul	10	14
Oak W	14	14¾
xObask	4½	6
xOBrien	55	59
OC Cme	..	9¾
Off Sp	12¾	15½
xOka R	9½	12½
xOkalt	35	37
xOLear	11	13
xOB S	75	..
Do p	8¾	..
O Loan	27	27
O Stl	20	21
Do p	..	124
xOpem	605	615
xOrchan	110	111
xOrena	5	5½
xOrms	29	30
Oshawa A	7	7½
xOsisk	26	28
Ovland	6¾	6¾
Do p	8¾	8¾
Pac P	880	900
xDo w	600	640
Pge Her	22½	23
xPall	31	47
xPamoil	30½	34
xPamour	57	62
xParam	9½	10
xPardee	14½	17½
xParker	325	330
Patno M	390	400
xDo w	27½	30
xPato	261	270
xPymst	16½	18
xPce Exp	11	15
xPrless	12½	13
Pbina	7½	7½
Do p	42½	45
Pnmns	28	29
Do p	102½	105
PCJI	19½	24
Do p	91	..
xPmo p	45	49
xPerron	14	14½
xPeruv	101	107
xPetrol	60	63
xPhil	50	55
Ph Eng	13½	14½
xPck Cr	67	69
xPit-Or	4	4½
xPlace	62	64
Placer	12¾	12¾
xPonder	57	58
xPortg	40	42
xP Rou	29	33
Pow Cp	46½	47
xPrairie	169	190
xP Pipe	275	290
Prem T	150	..
xP Iron	280	290
xPres El	49	50
Do rts	¼	¼
xPrest	365	370
Price Bro	75	79
xPrnto	201	210
xPros A	37	45
Prov Bk	36½	36¾
xProv G	195	198
Prov Trns	13¾	14
Do p	43	45
xPrdex	4	5
xQ Ascot	9	10
xQ Chib	25	25½
xQ Cop	12½	14
xQ Lab	3	4
xQ Lith	252	275
xQ Man	9	10
xQ Met	57	62
Qn Gas	10¾	11
Que Pwr	36	..
QN Gun	66	68
Do w	305	325
xQunst	10	11
Quem	870	880
xQuin	410	..
Do A	11½	13
xQnto	5½	7
xRdior	54	56
xRainv	20	21
xRanger	110	120
Rap-Gri	15	15½
xRayro	53	55
xRealm	25	28½
xReef	3	3½
xReeve	180	200
Reichld	17½	18
Reitmn	15½	17½
Do A	14½	15½
xRenab	161	163
xRexsp	29	31½
Reyn p	81½	88
xRio R	5	6
R Sk A	..	7¾
xDo B	..	300
xRix	17	18
Robtsn Jas	..	16
Robetsn	11¾	14½
Do A p	18	18¾
Do 2 p	15¾	17½
xRobin	210	400
xDo p	170	..

	Bid	Ask
R Little	13	13½
Do A	15½	16
xRoche	9½	10
xRckwn	17	19
xRky p	5	6
Roe AV	5½	5¾
Do p	74½	78
Rollnd Pap	35½	36½
Do p	72	78
xRowan	6	7
Roy Bk	70¾	70½
xRyanr	7½	8
xDo r	290	291
Roy O A	10	10¾
xRoyalit	700	710
Do p	19½	20
Russell	9¾	10
StL C	11½	11½
StL Cp	18½	18¾
Do A p	92	99¾
xSt Maur	82	84
Sal	9¾	10
xDo w	500	525
xSan A	85	87
xSand R	7½	9
xSapph	50	56
Do deb	35	37
xSarcee	74	79
xSatel	14	15
Scfe A	10½	10¾
Scythe	11½	11½
Do p	22	23
xSec F	370	385
xSelk A	425	450
Shawin	26¾	27
Do A	28½	33
Do A p	39½	..
Do B p	44	47
xShp Cr	88	92
Sher-Wms	38½	42
Do p	118¾	130
xShrt	275	280
Sicard	6½	7
Sicks	23½	24½
xSigma	325	335
Slknt	19½	25
Do p	35	37
xSil Mill	30	32
xSil St	20	30
Silwd A	10½	10½
Do B	..	10½
Simon &		
Sns 5%p	85	..
Simpsn	29	29½
xSiscoe	87	89
xSKD	290	295
Slat	25½	27
Do p	38½	42
Sogemines	18½	20
Smvill p	49½	50
Stham	33½	35½
Sou Can	58	..
xSth U	9	9½
xSpartan	100	135
xDo w	35	45
xSpoon	14½	15
xStafrd	420	435
St Bds	43½	43¾
St Pav	15	15½
St Rad	11½	12
Struct Stl	12¾	13
xStand W	220	235
xStanl	43½	45
xDo w	6	7
St B A	8¾	9½
Do B	8½	9½
xStnrck	23	29
xStnwl	35	39
xStarr	4	4½
Stedmn	34	35½
Stl Can	73¾	73¾
xSteeloy	4	4½
xSt R	880	890
Stbg p	95	..
Do A	19¾	20½
Ster Tr	52½	55
Stov p	10¾	11
Stu O	19	..
xStrgn	18	18½
xSub	75	80
xSud C	6	8
xSulli	145	148
xSun Ex	22½	23
S Prop	13¾	14½
Do p	22½	22½
xDo w	265	275
Stest o	14½	14¾
xDo c	355	410
Do p	92	..
xSwitsn	275	280
xSylvan	79	80
Tmbln	23¾	24½
Do p	39½	40
Tancord	4½	5¾
xTaurc	45½	47
xDo vt	37	48
Tay PC p	8½	8¾
xTeck-H	160	164
xTemag	196	198
xTerrit	20½	23
Texaco C	49½	49¾
Do p	82	84
xTexst	102	..
xTho L	79	80
xThom P	275	350
Thorncl	7½	7½
xTiara	4½	5
xTidal	53	56
TT C A	5	6¾
TT Tlrs	14	14
xTmbill	41	45
xTorbit	26	27
T-D Bk	53½	53½
T Elev	10¾	10¾
T Gen T	39¾	42
T Iron	15	16
Do A	14½	14½
Tor Mor	400	..
T Star p	58¾	59½
xTowag	6½	7
T Fin A	37½	37½
Do B	36½	36¾
Do 4½	79	85
Do 5	36¾	37
Do A r	14	..
Do B r	15	..
xDo w 56	125	165
xDo w 57	350	400
xTr Can	31½	38
T R C Pl	18½	18½
Tr-Mt	9½	9½
Tr PPL	13	14
xTr Res	15½	16½
xTriad	225	230
xTribag	24	28
xTrin	7	9
xTw C G	300	400
xUlt-Sh	7	9
Un A	8	8½
Do A 1 p	48	48
Do A 2 p	9	9½
U Gas	13¾	13¾
Do p	52½	53
xU Min	17	18
xU Asb	450	460
xU Can vt	85	90
U Cp A	26½	27
Do B	20½	..
Do p	25	27
U Fl A	52	54
Do B	33½	34¾
xU Keno	615	625
xUn F	19	20
xU Oils	115	116
Un Stl	7	7½
xUpp C	100	102
xVanad	165	175
xVando	3½	4
xVen Pow	60	75
xDo p	170	200
Vent	22½	22¾
xVespar	26	29
Viau	13	18
Viceroy A	6½	6¾
xDo B	315	325
V G Tr	37½	38½
xViolM	134	139
V Dar p	14½	14½
xWain	170	190
xWaite	610	620
W G W	36¾	36¾
W Eq	450	525
xWayne	610	620
xWebb K	275	300
xWeedon	4½	5
xWernr	7	9½
xWspac	14½	15
xW C O G	118	122
xDo w	45	50
xW Mal	3	4
xWbrn	51	53
xWstate	137	144
West	14½	15½
W C Br	32½	32¾
xW Cop	260	295
xDo w	60	75
xW Dec	95	100
W G A	34½	35½
Do p	24½	..
xW Lse	330	350
xW Nac	28	30
W Ply B	12	13
xW Surf	15½	17
Wstn A	34	34¾
Do B	34½	34¾
Do p 4½	86	86¾
Do p 6	105½	..
Do A w	13¾	13¾
Wh 1 p	28	33
Wh Pass	6¾	6¾
xWlroy	116	117
xDo w	52	53
xWiltsy	9	9½
xWinch	5	6
xWdfall	9	..
xW Alx	450	495
W GH p	93½	94¾
Wood A	25½	26
Wood P	82	85
Wdrd A	16¾	17
xDo A w	550	575
Wl Cb	9	9½
xWr H	108	112
xYale	16½	17
xYan C	3	4½
xYellor	5½	8
xYk B	95	96
xYKn A	160	200
xDo B	17	50
xYoung	62	64
xYukno	3½	4
Zellrs 4½%	43½	45
xZenith	275	280
xZenmc	21	21½
xZulapa	17	20

x—Quoted in cents.

Municipal Bonds
June 14, 1960

			Bid	Ask.	%
Halifax	4¼	'71	86¼	88¼	5.70
Hamilton ...	6	'79	99½	101½	5.87
Metro. Tor. .	6	'79	100¼	102¼	5.80
Montreal ...	6	'79	98	100	6.00
Ottawa	5⅛	'79	95¾	97¾	5.70
Regina	5¾	'82	93¾	95¾	6.10
Vancouver .	6	'80	98	100	6.00
Winnipeg ...	5¼	'77	91¾	93¾	5.85

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HOW ACCURATE IS REPETITION?

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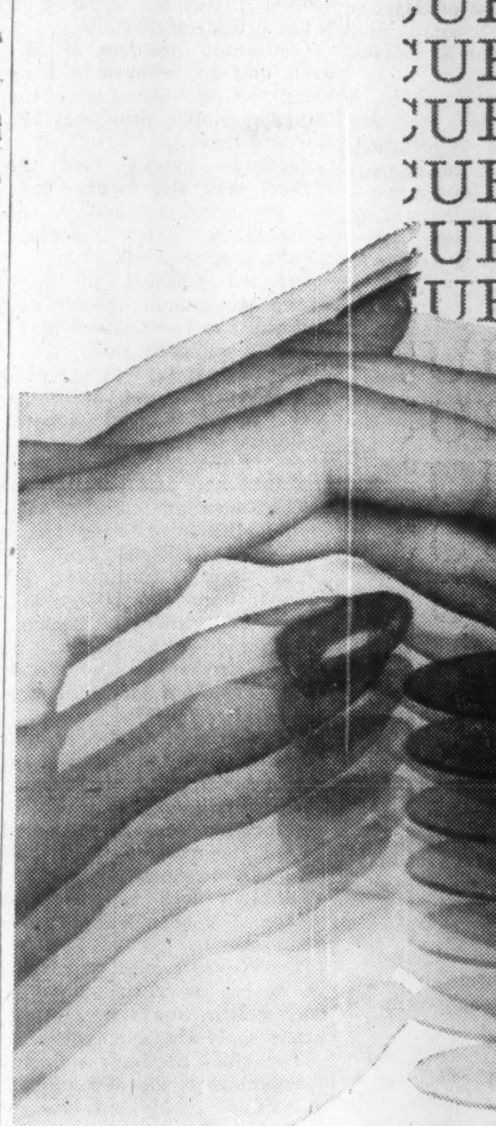

Operator boredom and fatigue cause errors and cost time. Friden 'Tape-Talk' systems eliminate human errors, cut time costs and increase output without additional personnel. Each Friden machine punches a tape as an automatic by-product of all data typed, providing a running record for automatic handling of almost every figuring and communicative routine. Invoicing and costing can be automatic, repetitive typing eliminated, accuracy assured. Any business large enough to get behind in paper work can benefit with a Friden 'Tape-Talk' system. For information call—

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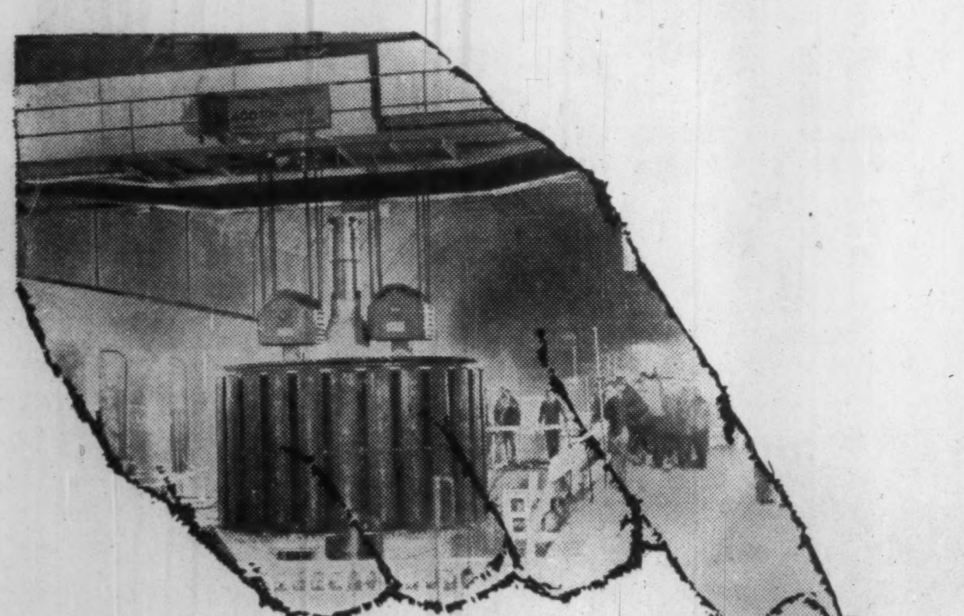


PROVINCIAL
PUTS 500 TONS AT YOUR FINGERTIPS

Picking up heavy things, moving them swiftly and surely, putting them down safely and accurately—that's Provincial's business. Designing new and better cranes to do your hoisting is Provincial's business, too!

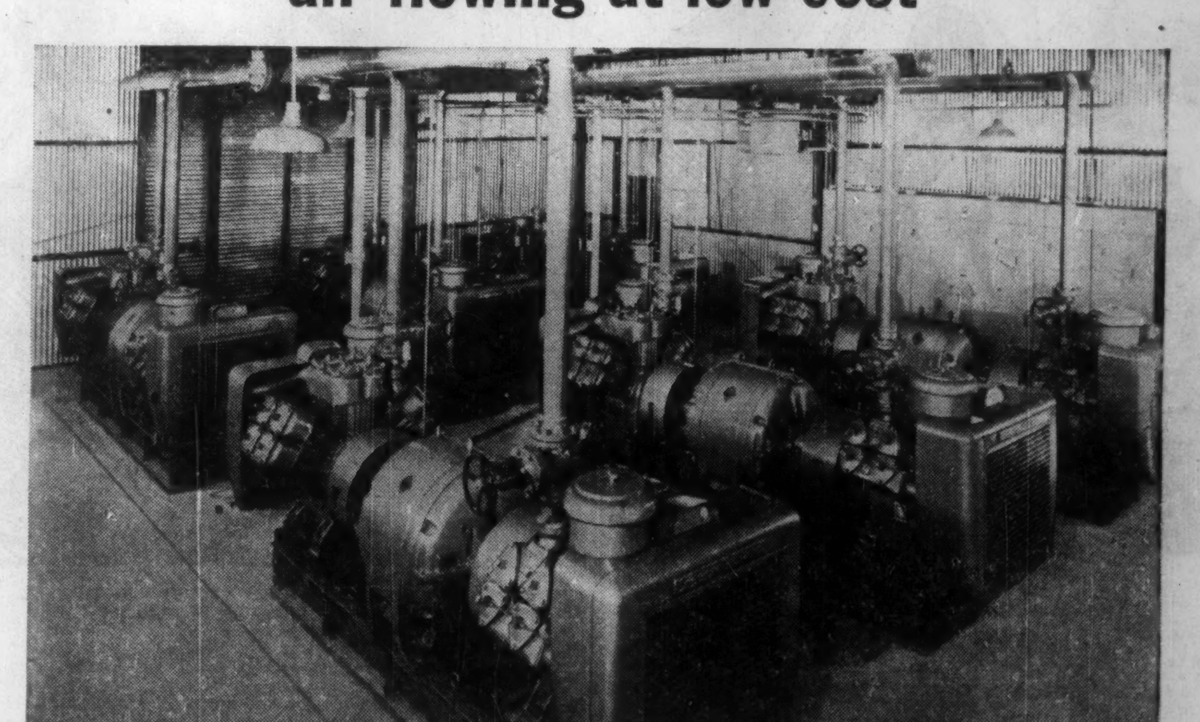
Over the years the most outstanding improvements in crane design have been pioneered by Provincial engineers . . . an impressive list of improvements for industrial cranes, hot metal steel mill cranes, level luffing dockside cranes, unloaders, and other types of cranes. Adjustable-Voltage Drive systems, patented Heat Exchangers which prevent motor burn-out, "Sensi-Dyne" and other new controls (patents applied for) which guarantee precision handling; and improved Dual Drives which ensure superior crane travel are just a few examples of Provincial's way of solving long standing problems. These are the reasons why more and more Canadian industries look to Provincial for ¼-ton hoists or 500-ton cranes.

PROVINCIAL

PROVINCIAL ENGINEERING LTD. NIAGARA FALLS, CANADA
MONTREAL • TORONTO

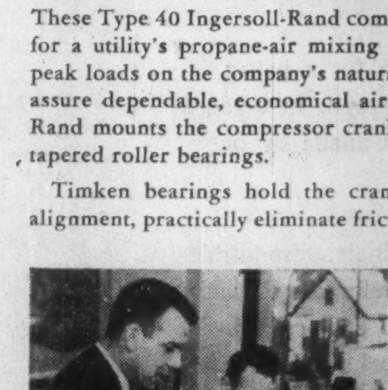
603

How I-R Compressor keeps air flowing at low cost

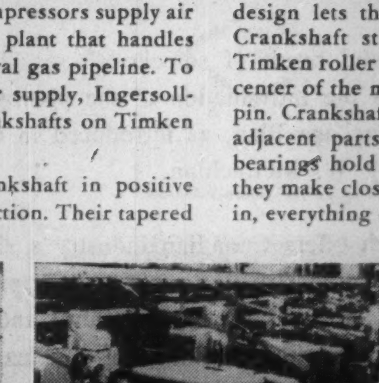


These Type 40 Ingersoll-Rand compressors supply air for a utility's propane-air mixing plant that handles peak loads on the company's natural gas pipeline. To assure dependable, economical air supply, Ingersoll-Rand mounts the compressor crankshafts on Timken tapered roller bearings.

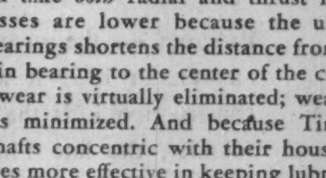
Timken bearings hold the crankshaft in positive alignment, practically eliminate friction. Their tapered design lets them take *both* radial and thrust loads. Crankshaft stresses are lower because the use of Timken roller bearings shortens the distance from the center of the main bearing to the center of the crank-pin. Crankshaft wear is virtually eliminated; wear on adjacent parts is minimized. And because Timken bearings hold shafts concentric with their housings, they make closures more effective in keeping lubricant in, everything else out.



SAVE TIME AND MONEY with service from our graduate engineer salesmen. Working with you at the design stage, they can often solve bearing problems on the spot.



MODERN, COST-CUTTING Timken bearing production methods mean savings for industry. Precision manufacture, highest quality, assure greatest bearing value.



Industry rolls on
TIMKEN®
REGISTERED TRADE-MARK
tapered roller bearings

Canadian Timken, St. Thomas, Ontario, Canada. Division of The Timken Roller Bearing Company. Timken bearings manufactured in Canada, Australia, Brazil, England, France and U.S.A.

DIVIDEND NOTICES

dividend notice

Notice is hereby given that a Dividend at the rate of Forty-seven and One-half Cents per fully paid share in the Capital Stock of the Bank has been declared for the quarter ending July 31st, 1960, payable at the Head Office and Branches of the Bank on and after August 2nd, 1960, to shareholders of record at the close of business on June 30th, 1960.

By Order of the Board
Toronto, Ontario
June 2nd, 1960

A. T. LAMBERT,
General Manager

THE TORONTO-DOMINION BANK
THE BANK THAT LOOKS AHEAD
K-3924

DIVIDEND NO. 363

Notice is hereby given that a Dividend at the rate of 55¢ per share on the Paid-up Capital Stock of this Bank has been declared for the quarter ending July 31, 1960, to shareholders of record at the close of business on June 30, 1960; that the same be payable on and after Monday, the first day of August, 1960, at any of the offices of the Bank; and that new shares subscribed for under the offer of June 10, 1960, rank, for the purpose of this Dividend, in the proportion that the amount paid on such shares on or before June 30, 1960, bears to the subscription price of $42.00.

By order of the Board,
J. DOUGLAS GIBSON,
General Manager.

Halifax, N.S., June 10, 1960.

THE BANK OF NOVA SCOTIA

QUÉBEC TÉLÉPHONE

DIVIDEND NOTICE

The following dividends have been declared, payable July 1, 1960, to shareholders of record at the close of business, on June 17, 1960.

5% Preferred Stock

A regular quarterly dividend of 25 cents per share.

5½% Preferred Stock

A regular quarterly dividend of 27½ cents per share.

By Order of the Board.
P. E. GAGNON,
Secretary.

RIMOUSKI, P.Q.,
April 22, 1960.

ARGUS CORPORATION LIMITED

NOTICE OF DIVIDENDS

Notice is hereby given that a dividend of sixty-two and one-half cents (62½c) per share on the outstanding $2.50 Cumulative Preference Shares Series B of the Company has been declared payable on the first day of August, 1960, to shareholders of record at the close of business on the twentieth day of July, 1960.

Notice is also given that a dividend of twenty-five cents (25c) per share on the outstanding common shares of the Company has been declared payable on the first day of September, 1960, to shareholders of record at the close of business on the twentieth day of July, 1960.

By Order of the Board.
H. H. EDMISON,
Secretary.

Toronto, Ontario,
June 7, 1960.

DOW BREWERY LIMITED

NOTICE OF DIVIDEND

NOTICE IS HEREBY GIVEN that a dividend of thirty-seven and a half (37½) cents per share on the outstanding common shares without par value in the capital stock of the Company has been declared payable on July 2, 1960, to shareholders of record at the close of business on June 13, 1960.

By Order of the Board.
J. R. LESPERANCE,
Secretary.

Montreal, Que.,
June 7, 1960.

DOMINION STEEL AND COAL CORPORATION LIMITED

DIVIDEND NOTICE

Notice is hereby given that a dividend of ten cents (10c) per share on the outstanding Ordinary shares without nominal or par value of the capital stock of this Corporation has been declared for the quarterly period ending June 30th, 1960. Such dividend to be payable on August 1st, 1960, to shareholders of record at the close of business on July 8th, 1960.

By Order of the Board,
G. C. BROADBENT,
Vice-President and Secretary.

VILLE ST. PIERRE, P.Q.,
June 1, 1960.

ARGUS CORPORATION LIMITED

NOTICE OF DIVIDENDS

Notice is hereby given that a dividend of sixty-two and one-half cents (62½c) per share on the outstanding $2.50 Cumulative Preference Shares Series B of the Company has been declared payable on the first day of August, 1960, to shareholders of record at the close of business on the twentieth day of July, 1960.

Notice is also given that a dividend of twenty-five cents (25c) per share on the outstanding common shares of the Company has been declared payable on the first day of September, 1960, to shareholders of record at the close of business on the twentieth day of July, 1960.

By Order of the Board,
H. H. EDMISON,
Secretary.

Toronto, Ontario,
June 7, 1960.

DOMINION DAIRIES LIMITED

Notice of Preferred Stock Dividend

The following dividends aggregating $1.75 have been declared payable on the outstanding 5% Non-Cumulative Preferred Stock of the Company in the amount, for the periods, on the dates and to shareholders of record at the close of business on the record dates set forth below, and that in accordance with the Preferred Share provisions such dividends shall be and are hereby set apart for payment, namely:—

AMOUNT PER SHARE			
44c	44c	43c	44c
QUARTERLY PERIOD ENDING ON			
June 30, 1960	Sept. 30, 1960	Dec. 31, 1960	Mar. 31, 1961
PAYMENT DATE			
July 15, 1960	Oct. 15, 1960	Jan. 14, 1961	April 15, 1961
RECORD DATE			
June 30, 1960	Sept. 30, 1960	Dec. 31, 1960	March 31, 1961

By Order of the Board of Directors.

J. A. SMITH,
Secretary.

MONTREAL, Que., June 7, 1960.

DIVIDEND NOTICES

THE CANADIAN BANK OF COMMERCE

Dividend No. 294

NOTICE is hereby given that a dividend at the rate of forty-five cents per fully-paid share on the outstanding Capital Stock of this Bank has been declared for the quarter ending July 31, 1960, payable at the Bank and its branches on August 1, 1960, to shareholders of record at the close of business on June 30, 1960.

By Order of the Board
J. P. R. Wadsworth,
General Manager

Toronto, May 27, 1960

IMPERIAL BANK OF CANADA

DIVIDEND No. 280

Notice is hereby given that a Dividend of Forty-five Cents (45¢) per share has been declared for the quarter ending 31st July, 1960, payable at the Head Office and Branches on and after Monday, the first day of August next, to shareholders of record of the 30th June, 1960.

By order of the Board.
H. W. THOMSON
General Manager

Toronto, 8th June, 1960

IMPERIAL *the* **BANK** *that service built*

THE PREMIER TRUST COMPANY

DIVIDEND NOTICE

A dividend of $2.00 per share, being at the rate of 8% per annum, has been declared on the paid capital stock of the company, payable on July 1, 1960 to shareholders of record at the close of business on June 17, 1960.

N. S. Watt,
Secretary.

Toronto,
June 6, 1960.

SUPERTEST Petroleum Corporation, Limited

NOTICE OF DIVIDENDS

5% PREFERENCE SHARES

A quarterly dividend of $1.25 per share upon the outstanding 5% cumulative redeemable sinking fund preference shares of the par value of $100 each in the capital stock of the Corporation has been declared, payable June 15th, 1960, to shareholders of record at the close of business June 14th, 1960, such dividend being at the rate of 5% per annum for the period from April 15th, 1960, to July 15th, 1960.

ORDINARY SHARES

A half-yearly dividend of 25 cents per share has been declared on the Ordinary shares of the Corporation for the half-year ending June 30th, 1960, payable July 15th, 1960, to shareholders of record at the close of business June 14th, 1960.

COMMON SHARES

A half-yearly dividend of 2½c per share has been declared on the Common shares of the Corporation for the half-year ending June 30th, 1960, payable July 15th, 1960 to shareholders of record at the close of business June 14th, 1960.

By Order of the Board.
R. W. MITCHELL,
Secretary.

London, Ontario,
June 3rd, 1960.

DOMINION DAIRIES LIMITED

NOTICE OF COMMON STOCK DIVIDEND

A dividend of ten cents per share has been declared on the Common Stock without nominal or par value of the Company, payable 15th July 1960, to shareholders of record 30th June, 1960.

By Order of the Board of Directors.
J. A. SMITH,
Secretary.

Montreal, Que.,
7th June, 1960.

THE CONSOLIDATED MINING AND SMELTING COMPANY OF CANADA LIMITED

DIVIDEND NO. 110

NOTICE IS HEREBY GIVEN that a Dividend of Forty cents (40c) per share, and an extra distribution of Ten cents (10c) per share, on the paid up Capital Stock of the Company, have this day been declared for the six months ending the 30th day of June, 1960, payable on the 15th day of July, 1960, to shareholders of record at the close of business on the 17th day of June, 1960.

By Order of the Board.
F. L. HALLAM,
Secretary-Treasurer.

Montreal, P.Q.,
June 8, 1960.

DIVIDEND NOTICES

BRITISH COLUMBIA TELEPHONE COMPANY

ORDINARY DIVIDEND

Notice is hereby given that a quarterly dividend of 55c per share has been declared on the outstanding Ordinary Shares of the Company, payable on July 1st, 1960, to shareholders of record at the close of business on June 16th, 1960.

By Order of the Board.
JOHN ROSS EVANS,
Secretary.

Vancouver, B.C.,
June 6th, 1960.

Belding-Corticelli Limited

NOTICE OF COMMON STOCK DIVIDEND NO. 120

A dividend of fifteen cents (15c) for the quarter ending 30th June, 1960, has been declared on the Common Stock of this Company.

The above dividend is payable on the 1st day of August, 1960, to shareholders of record at the close of business the 30th day of June, 1960.

By Order of the Board,
R. H. ALSTON,
Secretary-Treasurer.

Belding-Corticelli Limited

NOTICE OF PREFERRED STOCK DIVIDEND NO. 182

A dividend of one and three-quarters per cent (1¾%) has been declared on the Preferred Stock of this Company, for quarter ending June 30th, 1960.

The above dividend is payable on the 1st day of August, 1960, to shareholders of record at the close of business the 30th day of June, 1960.

By Order of the Board.
R. H. ALSTON,
Secretary-Treasurer.

HIRAM WALKER-GOODERHAM & WORTS, Limited

NOTICE OF DIVIDENDS

A quarterly dividend of 35 cents a share and an extra dividend of 35 cents a share, has been declared on the outstanding no par value Common stock of this Company, payable Friday, July 15, 1960, to shareholders of record at the close of business on Monday, June 20, 1960.

By Order of the Board,
A. H. STUART,
Secretary

Walkerville, Canada
June 9, 1960

UAB

Underwriters Adjustment Bureau Ltd.

NOTICE OF DIVIDEND

Notice is hereby given that a dividend of four dollars ($4.00) per share has been declared payable on July 1, 1960 to shareholders of record as at the close of business March 31, 1960.

By Order of the Board.
RIDLEY WILLIAMS,
Secretary.

Montreal,
June 13, 1960.

GENERAL PRODUCTS MFG. CORPORATION LIMITED

Dividend Notice

NOTICE is hereby given that a stock dividend at the rate of two shares of 3% non-cumulative redeemable second preference stock having a par value of 25c per share for each Class "A" and/or Class "B" share of the Company has been declared payable July 14, 1960, to the holders of Class "A" and Class "B" shares of the Company of record at the close of business June 30, 1960.

By order of the Board.
D. G. WALLACE,
Secretary-Treasurer.

London, Ontario,
June 8, 1960.

THE STERLING TRUSTS CORPORATION

DIVIDEND NOTICE

NOTICE is hereby given that a dividend of fifty (50c) or 2½% for the current quarter ending June 30, 1960, has been declared on the paid-up capital stock of the Corporation, and will be payable on July 2, 1960, to shareholders of record at the close of business on June 15, 1960.

By Order of the Board.
N. R. PETERSEN,
Secretary.

A. V. ROE CANADA LIMITED

A. V. ROE CANADA LIMITED

Dividend Notice

Notice is hereby given that a dividend in the amount per share set out below, has been declared payable on the 2nd day of July 1960, to shareholders of record at the close of business on the 17th day of June 1960, on the following outstanding shares of A. V. ROE CANADA LIMITED.

5¾% PREFERRED SHARES
(Dividend No. 11)
$1.43¾ per share

By Order of the Board of Directors.
J. H. CAMPBELL,
Secretary.

Toronto, Ontario,
13th June, 1960.

Grain Prices

Winnipeg Futures

Week to June 13, 1960

Crop year from Aug. 1, 1959 High	Low		High for Week	Low for Week	Close June 13
		Oats—			
.81½	.71¾	July	.81½	.80⅜	.81½
.80¼	.75¼	Oct.	.79⅞	.78⅞	.79⅞
.78½	.76½	Dec.	.77⅞	.86½	.77½
		Barley—			
1.01½	.95⅜	July	1.00⅞	.99⅞	1.00⅞
1.01	.95⅜	Oct.	1.00¼	.99¼	.99⅞
1.00	.98¼	Dec.	.98¼	.98¼	.98¼
		Rye—			
1.25⅞	1.03⅞	July	1.08¼	1.07	1.07½
1.14¼	1.06⅞	Oct.	1.07⅞	1.06⅜	1.06⅜
1.13½	1.06⅞	Dec.	1.08½	1.06⅞	1.07
		Flax—			
3.90	2.97	July	3.26½	3.18½	3.22½
3.23	2.89	Oct.	3.07	3.00¼	3.00¼
3.14½	2.90¼	Dec.	2.97½	2.90¼	2.90¼

Chicago Futures

Week to June 13, 1960

Crop year from Aug. 1, 1959 High	Low		High for Week	Low for Week	Close June 13
		Wheat—			
1.86⅜	1.81¼	July	1.85¼	1.84¼	1.84½
1.89⅛	1.88⅛	Sept.	1.88½	1.86⅞	1.87⅞
1.94¼	1.90⅞	Dec.	1.93⅞	1.92⅜	1.93
2.06⅞	1.94¼	Mar.	1.97⅞	1.96⅛	1.97¼
1.96½	1.93⅞	May	1.96⅝	1.95⅛	1.96¼
		Corn—			
1.22½	1.17	July	1.20¼	1.18½	1.18⅞
1.20⅞	1.14⅞	Sept.	1.19¼	1.17	1.17¼
1.14⅞	1.09¼	Dec.	1.12⅜	1.11¼	1.11¼
1.18¼	1.14¼	Mar.	1.16⅜	1.15¼	1.15⅜
1.18¼	1.18¼	May	1.18¼	1.18¼	1.18¼
		Oats—			
.74¼	.63⅞	July	.71	.69⅞	.70⅞
.73⅛	.63⅜	Sept. ...	.71½	.70¼	.71¼
.76⅛	.66¼	Dec.	.74⅜	.73¼	.74⅜
.77⅛	.75¼	Mar.	.76⅜	.75¼	.76
		Rye—			
1.34⅞	1.19¼	July	1.22¼	1.20⅞	1.21
1.28⅞	1.21⅞	Sept. ...	1.23⅞	1.21⅞	1.21⅞
1.28⅞	1.23⅞	Dec.	1.25⅜	1.24¼	1.24⅜
1.29	1.26	Mar.	1.27	1.26	1.26
1.28¼	1.27	May	1.27½	1.27	1.27
		Soybean—			
		July	2.14⅞	2.10⅞	2.10⅞
		Sept.	2.11¼	2.08⅞	2.08⅞
		Nov.	2.09⅜	2.07⅞	2.07⅞
		Jan.	2.13⅞	2.11¼	2.11¼
		Mar.	2.16⅞	2.14¼	2.14¼

Winnipeg Cash

	High For Week June 13	Low	High Prev.	Low Week
Oats—				
2 C. W.	.84	.83⅞	.84⅞	.83⅞
3 C. W.	.79¼	.79¼	.79⅞	.79¼
Barley—				
1 Feed	.99¼	.98⅜	.99⅞	.98⅞
2 Feed	.99	.98¼	.99¼	.98⅞
1 Malt	1.05⅞	1.04⅞	1.05⅞	1.05⅜
Rye—				
1 C. W.	1.07	1.06½	1.10¼	1.07⅞
2 C. W.	1.07	1.06½	1.10¼	1.07⅞

Chicago Cash

	High For Week June 13	Low	High Prev.	Low Week
Corn—				
2 Yell.	1.24¼	1.24	1.24¼	1.23
Oats—				
1 H. W.	..	..	..	..

Toronto Curb

Stock	Bid	Ask	Stock	Bid	Ask
Andian	6¼	7⅞	Du Pont	22	23
A C	40	41	Do p	72¼	76
Ang-N	6⅞	7¼	Gaspe	20	20
Asbest	24¼	24⅞	Hayes	23¼	30
B A B	49⅞	..	I Pap	104¼	105¼
xBulolo	440	470	Lob 1 n	11⅞	12¼
CD Sug	15⅞	15⅞	M Lrn	85	87
C Ving	30⅞	33	MO Pap	30⅞	30⅞
C Brnze	20¼	22	Ogilv	42¼	43
Do p	78	..	Do p	125¼	129
CG Inv	29⅞	30¼	xPend O	245	253
C Ing	39¼	41¼	Price	41¼	42¼
C Marc	5	5⅞	Sngmo	..	12¼
C Pap	41⅞	42¼	xSW P	151	160
xDalh	14	16	Th CG I	6¼	6¼
de Hav.	180	299	xYuk C	60	63
D Glass	76	77	Zellrs	33¼	36¼
Do p	13¼	13⅞	(xToronto Gold)	34.20	34.50
DOC	33	34			

x—Quoted in cents

Calgary Oils

Quoted in Cents

Stock	Bid	Ask	Stock	Bid	Ask
Albedena	2¼	3	L'ster Dev	20	..
Ald-Leduc	2	3	Merit	43	45
Amalta	3¼	4¼	Merland	9¼	11
Anaconda	45	50	Mill Creek	10	12
Bash Led	2	4¼	Mollusca	2	5
Blue Cr	22	25	N Richfield	2¼	3
C Fortune	2	2¼	N Y Oil	6	8
Castle	11¼	12	N C'tinental	..	¼
Claybar U	15¼	19	Nuco Pet	4	5
Command	50	..	Pamoil	30	..
Com. Min.	8	9	R'chmen's	8	9⅞
D L'hold	145	155	Ranger	110	..
Dom. Min.	¼	1	Renfrew	3	3¼
Dyn. Pet.	112	115	R C Vent	12	14
E Can Gas	1¼	3	Sage	60	69
Edoran	2¼	3¼	Sarcee	70	..
Gold Sat	3¼	4⅞	Sastex	1¼	3⅞
Gold Spike	4	4¼	Share	2	4
Ind Chem	..	40	Silver City	2	4¼
Kenare	1¼	2	Siscalta	..	60
Keno	19	21	Sturgeon	4⅞	5
Leamac	4	5	Transfield	2¼	4
Leduc Cal	4¼	5¼	Tri-Zone	1	3¼
			W Warner	5¼	6¼

Gold Bars Quoted

Rate Reported by Doherty, Roadhouse & Co., Toronto.

Canadian kilo bars of gold approximately 32 oz. each.

June 14, 1960

	Bid	Asked
	—per oz.—	
Latest week	$34.20	$34.50
Previous week	$34.20	$34.50

NOTICE

BLUE BONNETS RACEWAY INC.

Notice of Annual General Meeting

NOTICE IS HEREBY GIVEN that the Annual General Meeting of the Shareholders of BLUE BONNETS RACEWAY INC. will be held at the Head Office of the company, on Decarie Boulevard, Montreal, P.Q., on Thursday, June 30, 1960, at 5 o'clock in the afternoon, for the following purposes:

1. To receive and consider the Balance Sheet, Statement of Revenue and Expenses and Auditors' Report for the fiscal year ended February 29, 1960.
2. To elect directors for the current year.
3. To appoint auditors for the current year.
4. To transact such other business as may lawfully come before the Meeting.

ANDRE CHARRON
Secretary

DIVIDEND NOTICES

STELCO

THE STEEL COMPANY OF CANADA, LIMITED

DIVIDEND No. 196

Notice is hereby given that dividend No. 196 of sixty cents (60c) per share for the quarter ending June 30, 1960, has been declared upon the shares of the Company, payable Monday, August 1, 1960, to shareholders of record at the close of business Monday, July 4, 1960.

By Order of the Board,
W. C. CHICK,
Secretary,

Hamilton, Ontario, June 13, 1960

OCEAN CEMENT & SUPPLIES LTD.

DIVIDEND NOTICE

NOTICE is hereby given that a Dividend of seven and one-half cents (7½c) per share for the quarter ended June 30, 1960, has been declared on the outstanding Common Shares of Ocean Cement & Supplies Ltd., payable July 4, 1960, to shareholders of record at close of business June 17, 1960.

By Order of the Board.
J. D. BURTON,
Secretary.

Vancouver, B.C.,
June 10, 1960.

N. SLATER COMPANY LIMITED HAMILTON-CANADA

NOTICE IS HEREBY GIVEN that the following Dividends have been declared—

A Quarterly Dividend of Fifty-three Cents (53c) per share on the outstanding Preferred Shares of the Company will be paid 15th July, 1960 to shareholders of record at the close of business on 24th June, 1960.

A Regular Quarterly Dividend of Thirty Cents (30c) per share on the outstanding Common shares of the Company will be paid 2nd August, 1960 to shareholders of record at the close of business on 8th July, 1960.

By Order of the Board.
E. GARSIDE,
Secretary.

Canadian Stock Exchange

INDUSTRIAL

Stock	Bid	Ask	Stock	Bid	Ask
Anglo-Scand			Band-Ore	3¼	7¼
(new)	..	8	Barvallee	4	..
Atlas Tel.	47	48	Bateman	18	20
Beld Cort	11¼	13	Beatrice	3	4
Do p	12	13	Bel'chasse	28	..
Belgm Sts	7¼	..	Belle-Chib	3¼	5¼
Do p	13¼	16	Bornite	4½	5
Blue Bonnets			Burnt Hill	12	14
R'way	8	..	Calumet U	4	4¼
Btfly Ho.	220	..	Canalask	4¼	6
C Floor B	12¼	13	Canorama	49	50
C Arena	160	..	Canuba	3¼	4
C I Inv	16⅞	17¼	Carbec M	5¼	8
Do p	77¼	..	Cartier Q	9	12
C Kodiak	113	114	Chm Min	197	199
Cdn P&P	5¼	6⅞	Cen Man	3	6
C Silk A	35	110	Chess M	..	4
Catelli A	39¼	40	Chipman	4	4¼
C'zano A	130	..	Chib C Crp	9	12
C Div A	75	110	Cominga	5¼	9
Do p	29	..	C Bi-Ore	5	6¼
C Textiles	11¼	13	C Monpas	5¼	9¼
Crain R L			C Q Yell	4	5
(new)	18⅞	..	C V Mines	81	84
Da & Fr A	45	48	Dolsan	5¼	8
Dalfen's	90	110	Fab Metal	10	11
Dom Eng	15	16¼	Fano	3	4
E Koot p	122	..	Fontana	..	3
Feralco I	..	75	Fdy Bay	5	7
Freiman c	33	..	Gold Age	64	69
Horner A	20¼	..	Gui-Por U	5¼	7
Hub Flt	7⅞	..	Haitian	3¼	4
I Paints A	..	12	H'crest C	400	..
I Found	38	40	I Ceramic	9	12
Do p	50¼	57¼	Iso Uran	57	60
L'bert A	13	..	Kontiki L	4	5¼
Do B	13	..	Lingside c	2	3
Latonia I	24⅞	25¼	Lithium	5	..
Lochaber	150	..	Mid-Chib	18	20
Melchers	..	7⅞	Mogador	9	10
Do p	11¼	13	Monpre	..	13
M Ro Dry	6¼	6¼	N Formaq	5¼	6
M Ro Rice	20¼	20⅞	N Jack L	2	4
Mussans	7	9	N S'Tiago	2	3
Nfld L&P	45	50	N W Amu	11	13
PAC Atl	..	300	Nocana	5	6
Pat Mfg	8	..	N A Asb	5	6¼
Do p 7%	20	22¼	N A Rare	50	55
Paul S S	5	8	Obalski	11	13
Po Crp 1	43	43¼	Opemisca	11	12
Do 2nd	65¼	70	Orchan U	108	115
Prem Steel	8⅞	9	Partridge	2¼	..
Que-Tal	31	31¼	Paudash	13	15
Do warr	12¼	13¼	Pennbec	15	18
Do A	20	20⅞	Pitt	3¼	4
Renold A	..	16¼	Por Prime	6	6¼
Sangamo	11¼	11⅞	Portage	40	43
Soca Ltd	170	205	Q Cobalt	355	360
S & S (n)	6¼	7	Q Smelt	10	12
Sobeys Sts	11¼	13	Rbval Min	19	22
S Can p	116	..	Red Crest	2	3
Tke Bros	..	35	St L Min	620	625
Tr C Crp	..	31	S Dufault	24¼	25
Tr C Frzs	5¼	6¼	Std Gold	4	5
Un Am A	12	13	Tache L	7	9
Do B	..	13	Tazin	7	9½
Do vt A	12	13	Tib Expl	5	7½
U Loan Cp	17	18¼	Trebor	2¼	3
U P Prop	190	200	Vanguard	45¼	47
W'terman	5¼	5⅞	Virg Min	7	9
Win Hotel	..	28	Wendell	3	3½
Wood Mfg	..	36	Westville	3¼	5
W'dford A	50	..	**OILS—Cents**		
Do B	10	..	Bluewater	10	24
MINES—Cents			Bonn'lle	15	17
Alscope	10	12	Castle	4	5¼
Ameranium	3	4	Futurity	20	25
Anthonian	4¼	7	Gaspe	4	5¼
Arno	5	6	Gateway	2	4
Atlas Sulp	5	5¼	Isr Cont	19	25
Aug Expl	25	26	N Spr Co	2	3
Baker Tal	11¼	15	Quebec	2¼	3
			Titan Pet	15	16

Options on Stock

Supplied by Kippen & Co. Inc., Montreal
90-Day Call Offerings
per 100 shares
at current market prices
June 13, 1960

Abitibi	$300	Internat'l Nick	$425
Alberta Gas	190	Irish Copper	19
Algoma Steel	300	Iron Bay	35
Aluminium	250	Jacobus	19
Bailey Selb A	75	Kerr Addison	150
Brazilian	75	Madsen R L	30
Campbell Chib	70	Maritimes	18
Can Tungsten	40	Massey-Ferg	100
Can Delhi	65	Medallion	25
Can Export Gas	28	Merrill Island	15
Can Husky	85	Murray Mng	14
Cassiar	140	Noranda	370
Central Del Rio	55	Nrth Coldstrm	20
Cons Discovery	50	Opemiska	70
Cons Mng	165	Orchan	20
Cons Mosher	35	Pacific Pete	100
Copper Rand	20	Place Oil & Gas	15
Creative Telfm	125	Provo Gas	29
Denison	110	San Antonio	17
Dom Fdy & Stl	430	Sherritt Gordon	35
Dom Stores	425	Steep Rock	110
Dom Tar & Ch	165	Temagami	30
Geco	150	Trans-Can Pipe	190
Gunnar	95	United Asbestos	55
Hollinger	225	United Oils	20
Home Oil A	95	Westcoast	150

Commodities

	Latest week	Previous week	Same week last yr.
Cattle	$22.50	$22.50	$25.00
Hogs	23.06	22.12	24.00
Copper, lb.	.33	.33	.31½
Coffee, lb.	.37	.37	.36
Sugar, raw, lb. ..	.0565	.0555	.0583
Hides	.18½	.18½	.28
Weekly Commodity Indices			
Dow Jones Fut.‡	145.68	146.01	149.23
U. S. Labor	119.7	119.7	119.4

Monthly Price Indices

	Latest month	Previous month	Same month last yr.
Retail C.P.I.* (May)	127.4	127.5	125.6
Canada (D.B.S.):			
W'sale (Apr.) ...	231.3	229.6	231.2
C. F'm Pr.* (Apr.)	218.3	213.6	217.3
U. S. W'sale (Feb.)	119.4	119.3	119.5
Gr. Br. W'sale† (Feb.)	111.8	111.8	111.7

Base of price quotations is as follows: Cattle-Steers, good up to 1,000 lb., to price Toronto. Copper-electrotypes, New York. Coffee No. 4 Santos. Spot Raw Sugar 96 degrees centrifugal c.i.f.

*Base years 1947-49=100.
‡Base years 1924-26=100.
†Base year 1954=100.
•Revised.

Bond Tenders

12 Noon, June 16, 1960, Government of Canada Treasury Bills — Payable Sept. 16, 1960, and Dec. 16, 1960, $120,000,000. Dated June 7, 1960.

12 Noon, June 21, 1960. Town of Louisburg, N.S. — 6%, 1-20 year debentures, $54,000. Dated July 1, 1960.

DIVIDEND NOTICE

CANADIAN PACIFIC RAILWAY COMPANY

DIVIDEND NOTICE

At a meeting o the Board of Directors held today a dividend of seventy-five cents per share on the Ordinary Capital Stock was declared in respect of the year 1960, payable in Canadian funds on August 1, 1960, to shareholders of record at 3.30 p.m. on June 24, 1960.

By Order of the Board.
T. F. TURNER,
Secretary.

Montreal, June 13, 1960.

Price Earnings Ratios

RATIO OF MARKET VALUE TO EARNINGS OF THE 20 STOCKS COMPRISING THE TORONTO STOCK EXCHANGE AND INDUSTRIAL INDEX

EARNINGS PER SHARE	PRICE June 10	RATIO June 10	WEEK PREVIOUS	MONTH AGO
$52.96	$764.38	14.31	14.21	14.01

Average Yields

(COMPILED BY MOSS, LAWSON & CO.)

	JUNE 13 %	WEEK AGO %	MONTH PREVIOUS %	YEAR AGO %
114 Average Stock Yields ..	4.76	4.79	4.79	4.01
6 Banks	3.72	3.73	3.72	2.84
18 Preferred and "A" Stocks	5.26	5.32	5.36	4.73
64 Common Industrials	4.27	4.30	4.32	3.60
26 Mining	5.87	5.86	5.78	4.79

Advances and Declines

Week Ended	Toronto Ups	Toronto Downs	Toronto No Change	Montreal Ups	Montreal Downs	Montreal No Change
May 6	257	374	193	96	107	140
May 13	290	364	192	106	107	143
May 20	323	322	216	134	94	115
May 27	260	351	189	99	111	129
June 3	288	363	188	105	98	160
June 10	342	306	197	126	71	165

Volume of Stock Sales

	Montreal	Toronto	Calgary	Vancouver	N.Y.S.E.	American
June 13	310,900	1,534,000	37,522	56,202	3,180,000	1,240,000
June 10	219,900	1,488,000	39,030	88,494	2,940,000	1,130,000
June 9	269,700	1,741,000	14,200	53,302	3,820,000	1,330,000
June 8	308,300	1,617,000	69,335	71,403	3,800,000	1,130,000
June 7	274,900	1,727,000	38,293	81,989	3,710,000	1,120,000

Significant Investors' Index Numbers

No. of Securities	Mach. and equip. 10	Pulp and paper 9	Milling 2	Oils 5	Textiles and clothing 7	Food and allied prod. 13	Beverages 10	Bldg. mater. 14	Total Industrials 72	Banks 7	Total utilities 13	Total co's 92
1935 to date:												
High	947.5	1238.1	252.0	285.5	410.5	304.8	724.4	590.5	315.9	399.1	218.9	297.8
Low	68.5	51.6	59.7	40.9	77.7	72.4	79.3	68.7	56.1	68.4	64.5	60.6
1960 Monthly Figures:												
Jan.	741.9	1156.8	204.2	180.2	203.2	224.5	656.0	518.0	267.6	332.8	191.0	259.2
Feb	713.0	1080.0	194.0	173.8	197.2	216.8	634.6	488.7	257.9	316.3	186.8	249.9
Mar.	671.4	1058.1	181.5	170.8	190.0	215.8	611.0	462.2	249.3	308.8	184.5	242.3
Apr.	682.2	1101.4	181.8	173.2	189.1	230.0	625.6	469.2	256.7	309.1	188.2	248.8
1960 Weekly Figures:												
May 5 ..	682.5	1087.1	179.5	166.3	189.4	225.0	625.8	463.2	252.5	306.3	189.0	245.5
May 12 ..	684.5	1105.3	184.5	167.8	189.3	225.1	627.9	466.3	254.1	307.8	187.3	246.5
May 19 ..	711.9	1139.3	185.0	168.9	191.1	222.2	636.7	470.1	260.3	308.8	188.0	251.4
May 26 ..	717.7	1167.1	190.2	168.9	193.8	225.6	639.7	467.2	262.6	312.5	188.1	253.4
June 2 ..	698.2	1172.3	191.4	166.2	194.4	227.3	645.5	469.7	261.0	314.9	190.2	252.7
June 9 ..	702.1	1184.3	189.2	169.0	190.8	226.2	651.1	468.6	261.5	319.5	194.7	254.2

*High and low for year from 1935 to date inclusive are based on weekly figures used by the Dominion Bureau of Statistics.

TORONTO STOCK EXCHANGE INDEX

	20 Indust.	20 Golds	15 B.M.	15 W.O.
June 13	500.38	77.45	155.74	85.71
June 10	500.25	78.33	156.65	86.11
June 9	500.53	78.25	156.73	86.48
June 8	501.25	78.06	157.45	86.23
June 7	500.63	78.34	157.54	85.93
Month Ago .	490.00	79.12	155.95	87.29
Year Ago ..	531.73	94.02	173.85	122.59
1960 High ..	533.85	90.20	176.74	106.78
1960 Low ...	474.52	77.45	152.57	84.96

MONTREAL STOCK EXCHANGE INDEX

	10 Util.	20 Indust.	30 Com.	10 Pprs.	15 Golds
June 13 ..	140.6	285.6	237.3	453.5	70.94
June 10 ..	140.6	285.6	237.2	451.8	70.45
June 9 ..	142.0	284.7	237.1	454.1	70.58
June 8 ..	141.6	285.9	237.8	454.6	70.63
June 7 ..	141.4	285.9	287.8	451.7	71.11
Mon. Ago	137.3	279.1	231.9	430.7	71.06
Year Ago	155.9	313.2	260.8	438.7	89.00
1960 High	145.1	320.0	261.7	466.7	85.34
1960 Low	135.8	277.2	230.5	409.3	70.45

DOW-JONES CLOSING STOCK AVERAGES

	30 Indust.	20 Rails	15 Util.	65 Stocks
June 13	655.85	145.94	91.50	214.02
June 10	654.88	146.01	90.89	213.56
June 9	656.42	145.51	90.73	213.64
June 8	650.35	145.96	90.29	212.38
June 7	645.58	143.19	89.69	210.36
Month Ago .	617.39	139.42	89.41	203.63
Year Ago ..	624.59	162.85	86.21	210.26
1960 High ...	685.47	160.43	91.50	222.62
1960 Low	599.10	137.68	85.02	198.00

UGG

50,000 Farmer - Owners with an Equity in the Company of Over $11,000,000.

797 County Elevators in Manitoba, Saskatchewan and Alberta.

TERMINAL ELEVATORS AT PORT ARTHUR & VANCOUVER

UNITED GRAIN GROWERS LTD.

CALGARY • REGINA • WINNIPEG • SASKATOON • EDMONTON

K. A. POWELL (CANADA) LTD.
GRAIN SHIPPERS AND EXPORTERS
GRAIN FUTURES
Owners and Operators
Fort William Terminal Elevator Co. Ltd.
and Powell Transports Ltd.
Head Office—563 Grain Exchange, Winnipeg, Man.
Affiliated Companies—Fort William, Ont., Montreal, Que., Vancouver, B.C.

N. M. PATERSON & SONS LIMITED
FORT WILLIAM WINNIPEG MONTREAL
GRAIN DIVISION
Grain and Coal Merchants
Country and Terminal Elevators
STEAMSHIP DIVISION
Carriers of All Bulk Cargoes

McCabe Grain Company Limited
WINNIPEG, CANADA
LONDON, ENGLAND VANCOUVER

THE WEEK'S QUOTATIONS

Montreal and Toronto Winnipeg, Calgary and Vancouver

Quotations here listed are the official, exchange prices for listed stocks including curb market quotations. For unlisted stocks, quotations by unlisted dealers are given. The Financial Post cannot accept any responsibility for these quotations.

Bid and Ask quotes of Toronto and Montreal exchanges up to press time are published on page 4

Industrial Stocks

WEEK ENDING JUNE 10, 1960

Range 1960 High	Low	Div. $	Y'ld R'teJun10 %	Company	Sales	Last May 3	Week end. June 10 High	Low	Close or Latest
.42	.24	..	..	Abitca Lumber	39700	.30	.39	.30	.38
41¾	35	1.70	4.2	Abitibi	15220	41	41¼	40⅝	40¾
23	21¾	1.12½	4.9	Do. 4½% pref.	915	22¼	23	22¼	23
11	9¼	.60	5.9	Acadia Atlan.	769	10	10¼	9¾	10¼
87½	85	5.00	5.9	Do. 5% pref.	50	87½	85	85	85
19½	17¾	1.20	6.2	Do. (A)	155	19½	19½	19	19¼
..	..	..	..	Admiral	nil	..	B16⅝	A16⅞	17¾
21	17¾	.70	3.9	Agnew Surp.	25	18⅛	18	18	18
..	..	..	..	Alaska Y. Pipe	nil	..	..	A2.00	2.50
.75	.70	..	..	Alaska Refin.	nil	..	..	..	.75
6½	6	..	..	Do. pref.	nil	..	..	A5	6½
2.90	2.15	..	..	Albt. Dist.	7050	2.35	2.40	2.15	2.25
2.35	1.75	..	..	Do. V.T.	4975	1.95	2.10	1.85	1.95
1.20	.72	..	..	Do. S. Pur. W.	1800	.80	.82	.80	.81
28½	18⅝	..	..	Albt Gas Tr.	10842	19⅝	19⅝	19⅛	19½
4.95	4.75	..	..	Do. A Warr.	12213	..	4.95	4.75	4.85
101¾	100	..	..	Do. 6¼% A Pf.	2743	..	101¾	100	101¾
19¾	17	1.00	5.7	Algoma Cent.	475	17¼	18	17¾	18
60	52½	3.00	5.4	Do. 6% Pref.	25	56	56	56	56
6.10	4.50	..	..	Do. Warr.	2575	5.00	4.85	4.75	4.85
40½	32¼	*.60	..	Algoma Steel	8942	34⅝	34½	33⅝	33⅞
8	7	‡.25	..	Algonquin	nil	..	B8	A8½	7½
18½	18⅛	1.30	6.8	Do. Pref.	nil	..	B18¼	A19½	†19
2.50	2.35	..	..	Do. Sh. Pur. W.	nil	..	B2.10	..	2.50
33⅞	28	*▲.30	..	Aluminium	28600	31⅞	32¼	31½	31⅞
21	19½	1.00	4.8	Alum. of Can. 1st P.	895	20⅝	21	20½	21
43½	40	2.25	5.2	Do. 2nd pfd.	3092	43	43½	42¾	43⅝
9½	4.50	..	..	Analogue	2950	5.12½	5.00	4.50	4.90
4.00	2.10	..	..	Do. Warr.	nil	..	B2.00	A3.00	2.50
7	6⅛	*▲.20	..	Andian Nat.	nil	..	B6⅛	A7¾	7⅛
†32	†24¼	.50+*.25	..	Anglo Can. Oils (Brandon)	nil	..	B27	A32	†27
42	33	2.00	5.0	Ang. Cdn. Pulp	624	39½	40¼	39	40
51	49	2.80	5.6	Do. Pfd.	195	51	51	49¾	49¾
41	37	2.25	5.5	Ang. Can. Tel. P.	120	41	41	41	41
50½	47½	2.90	5.8	Do. $2.90 Pref.	224	50	50	49½	50
8	6¼	*.17½+.10	..	Ang. Nfld.	2500	7	7¼	7	7⅛
†8	†8	*.25	..	Angl-Scand. Invest.	nil	..	..	A3	†8
38	29	*††.36	..	Anthes. Imp. A	500	30	30	30	30
..	..	*††.007+■	..	Do. (B)	nil	..	..	A33	..
92	85	5.50	6.3	Do. 5½% Pf. B	10	87	89	89	89
35¼	26½	1.00	3.4	Argus	4142	29¼	29⅞	28⅞	29¼
64½	55	2.40	4.3	Do. A Pref.	50	55	57¼	55¼	55¼
49	43	2.50	5.2	Do. B Pref.	205	47	49	45½	48½
..	..	▲1.00+‡■	..	Aro Equip.	nil	..	..	..	..
26¼	20⅝	1.20+‡.20	..	Asbestos	3990	25	25	24½	24¾
9	7½	.80	10.0	Ash Temple	20	9	7¾	7¾	7¾
..	..	6.00	6.7	Do. (A)	nil	..	B82	A95	†90
9	9	.65	6.8	Do. (B)	5	†9½	†9½	†9½	†9½
†11	†10⅞	.60	4.8	Ashdowne Hdwe. A	nil	..	B11½	..	†12½
13½	10½	.72	5.5	Do. (B)	490	13	13	12¼	13
..	..	▲4 00+*▲▲2.00	..	Assoc. T&T. Pfd.	nil	..	..	..	101
14½	12	..	..	Atlan. Accept.	nil	..	B14½	..	14½
†18	†15	1.10	7.3	Do. Pref.	nil	..	B15½	A20½	†15
28	20	1.00+*.25	..	Atlas Steels	4168	21	21⅞	21	21½
.53	.40	..	..	Atlas Tele.	26000	.48	.48	.47	.48
9½	8	*††.11¾	..	Auto Electric n	725	8½	8⅜	8¼	8¼
8	6¾	*.15+*▲.15	..	Auto Fabric A	50	7	7	7	7
3.80	2.75	..	..	Do. (B)	100	3.60	2.75	2.75	2.75
7½	7	.40	5.7	Avalon Tele.	270	7½	7	7	7
				B					
53⅞	47½	1.60+‡.35	..	Bk. Can. Nat.	977	52	53½	52½	53½
55¼	47¼	1.80+‡.25	..	Bk. Montreal	4943	51⅝	52	51⅛	51¾
71¼	59¼	2.20+‡.10	..	Bk. N. Scotia	2462	62¼	64	62¼	63⅞
41	33½	1.00+‡.25	..	Bk. Provinciale	1427	34½	36¼	34½	36¼
..	..	4.00+*1.00	..	Barber-Ellis	nil	..	B80	..	..
..	..	3 50	..	Do. Pfd.	nil	..	..	..	..
..	..	..	..	Barcelona	nil	..	B4.20	..	†5.25
†5	†5	..	..	Bates & Innes A	nil	..	B5	A5¼	†5
44	37	2.00	4.8	Bathurst Pr. A	380	43	43	42	42
33¾	23	..	..	Do. (B)	1013	†30¼	31¼	31	31
7¾	5	.40+‡.10	..	Beatty Bros.	2725	6⅝	7	5	5¾
24½	21	1.00+*.25	..	Beaver Lumber	295	22	21⅜	21½	21½
16½	16	1.00	6.1	Do. (A)	nil	..	B16	A17½	16½
25⅞	25⅞	1.40	5.7	Do. Pref.	nil	..	B25	A27	†24¾
15	10¼	*.30+.40	..	Belding Cort.	nil	..	B11½	A12	12½
12	12	.70	5.8	Do. Pref.	nil	..	B12	A13	12
8½	8½	..	..	Belgium Stores	nil	..	B7½	..	8½
13⅛	13⅛	1.00	7.3	Do. Pref.	nil	..	B13½	A16	13⅝
46	42⅝	2.20	4.8	Bell Telephone	38184	45¼	46	45⅛	45⅞
6½	6½	.40	6.2	Biltmore Hats	nil	..	B6⅝	A7½	6½
14	12½	1.00	7.4	Do. A Pref.	nil	..	B12¾	A13¼	13½
55	55	2.40+‡.40	..	Bird Constr.	nil	..	B50	A55	55
8⅞	8	§♦♦ 20	..	Blue Bonnets	nil	..	B8	A8	8
1.40	1.20	..	..	Do. Warr.	nil	..	..	A2.50	1.25
48	43	2.75	5.9	Bowater Mer. P.	120	48	47¾	47	47
10¼	7¼	*.28+■	..	Bowater Pap.	3376	8⅛	8⅜	8¼	8⅜
46⅛	41	2.50	5.5	Bowater N.A. 5%pf.	860	†40	45½	44¾	45½
48¾	45	2.75	5.7	Do. 5½% Pref.	735	48	48½	47½	48½
32	27	1.00+‡.50	..	Bowes Ltd.	nil	..	B30	A34	32
7¼	6¾	.60	8.6	Boyles A	nil	..	B6⅝	A7½	7
4.10	3 50	..	..	Do. (B)	nil	..	B3.75	A5.00	3.50
5.00	3.50	..	..	Brazilian Tr.	77596	3.75	5.00	▲3.75	4.95
†85	†82½	6.00	6.7	Do. Pref.	nil	..	B79	..	†89¾
6⅞	6	*††.10	..	Bridge & Tank n	875	6¾	6½	6	6½
47½	41	2.90	6.4	Do. Pref.	10	45½	45	45	45
49¼	42	1.00	2.2	Bright T. G.	40	44¾	44¾	44¾	44¾
21	21	1.15	5.5	Do. 5% Pfd.	nil	..	B20½	A25	21
53	49	2.00+‡.80	..	Br. Am. Bk. Notes	50	51	50	49	50
35½	27⅝	1.00	3.6	Brit. Amer. Oil	20663	28	28¼	27¾	27¾
74¼	69	4.00	5.4	B.C. Elec. 4% Pf.	135	73½	†74½	73⅝	74
41½	36	2.12½	5.1	Do. 4¼% Pref.	335	40	41½	40¼	41½
42½	37	2.25	5.5	Do. 4½% Pref.	30	41½	40⅝	40⅝	40⅝
85½	80	4.75	5.7	Do. 4¾% Pfd.	183	83½	85	83	84
47	42½	2.50	5.3	Do. 5% Pfd.	360	46	47	46½	46¾
51	47	2.75	5.7	Do. 5½% Pfd.	925	50½	51	48½	48½
14½	11⅞	*.25	..	B.C. Forest	3803	12⅛	12⅝	12⅛	12½
14½	14	.75	5.3	B.C. Packers A	150	14¼	14¼	14¼	14¼
14½	14	1.00	7.1	Do. (B)	300	14	14⅛	14	14⅛
37½	30½	1.40	4.3	B.C. Power	10989	31⅞	33⅞	31⅞	32⅞
45½	42	2.20	4.8	B.C. Tele.	2400	44½	45½	44	45¾
1.30	1.10	..	..	B.C. Turf	4500	1.20	1.25	1.10	1.10
11½	9⅞	..	..	Brockville Ch. Pf.	2785	10½	11	10⅜	11
18	17	1.04	5.9	Brooke Bond Pf.	nil	..	B17¼	A18¼	17½
15	9⅞	§▲.30+■	..	Brown Co.	2421	13⅛	14¾	13¼	14⅝
11	8	§§*.30	..	Bruck S. Mills A	100	8	8	8	8
3.00	2.50	..	..	Do. (B)	97	2.50	2.50	†2.20	†2.20
34½	29¼	1.80	5.2	Build Prod.	885	33½	34½	33¼	34½
6	5	.50	8.3	Bulloch's A	5	5⅞	6	6	6
5.00	4.90	.35	7.8	Do. (B)	nil	..	B4.10	A4.90	†4.50
18	15½	.60+*.25	..	Burlington St'l.	135	16	16	15½	15½
14	12¼	.80	5.8	Burns & Co.	875	13½	14	13½	13¾
7	5½	.45	7.3	Burrard D.D. A	nil	..	B6⅛	A6½	6⅛
9½	9	*.15	..	Burrard Mtg.	100	9½	9	9	9
2½	2½	..	..	Do. Warr.	nil	..	B2	A2½	2½
2.40	2.10	..	..	Butterfly Hos.	125	2.40	2.40	2.40	2.40
				C					
19⅞	16½	.40	2.1	Calgary Pwr.	13295	18	19⅛	18	18¾
100	93	5.00	5.2	Do. 5% Pref	453	97	97	93½	97
				Canada					
3.75	3.50	.10	2.8	Canada Bread	nil	..	B3.65	A4.15	3.60
52	52	2.50	4.8	Do. Pref. B	nil	..	B52	A56	52
33⅝	26¾	1.00	3.6	Canada Cement	5624	28	28½	27½	28
26⅞	24½	1.30	4.9	Do. Pref.	300	26½	27¼	25¼	26¾
18¼	12½	.20	1.3	Can. C. & C. Stone	1080	13	15½	13½	15¼
17½	13½	.60	3.9	C. & D. Sugar	13675	14	15¼	13½	15¼
14	12¾	1.00	7.8	Can. Floor B	100	13	12¾	12¾	12¾
22	19	.60+*.20	..	Can. Foils	nil	..	B19½	A20¾	19
21	20	.60+*▲▲.52	..	Do. (A)	100	20¼	21	21	21
†9	†9	..	..	Can. Forg.	nil	..	B7	A9½	†9
22¾	21	1.50	8.3	Do. (A)	nil	..	B15	A20	†18
22¾	18	*1.00	..	Can. Iron	7235	19¾	19¾	18	18
83	75	4.25	5.7	Do. 4¼% Pref.	25	76½	75	75	75
10	10	§.50	..	Can. Machine	nil	..	B10½	A15	10
57	45½	2.00	3.7	Can. Malting	620	51	54	50¾	54
24½	23½	1.17	4.9	Do. 4½% Pfd.	150	23¾	23¾	23½	23¾
48	42¼	††1.75	..	Can. Packers A	25	†42	43	43	43
47½	41⅝	‡‡1.75	..	Do. (B)	660	42	42½	41½	42½
58	48	2.00	4.1	Can. Perm. Mtg.	185	50	50	49	49
85	79	4.40	5.3	Can. Safeway Pf.	3	84¼	82½	82½	82½
45½	39½	1.40	3.3	Can. Steamships	427	41¼	43	42¼	43
11½	10¾	.62½	5.7	Do. Pref.	92	11	11	10¾	10⅞
34	29¼	1.20+‡.20	..	Can. Vinegars	60	30½	30½	30½	30½
†7¾	†7¾	..	..	Can. West Cord A	nil	..	..	A9	†7¾
..	..	..	..	Do. (B)	nil	..	..	..	..
..	..	4.00	4.0	Can. W. Cable A	nil	..	..	..	†100
9¼	6¾	.20	2.6	Do. (B)	150	8⅛	8	7⅝	7⅝
				Canadian					
..	..	4.00	2.6	Canadian Arena	nil	..	B160	..	155
19⅞	13	..	..	Cdn. Aviation	1090	18¼	19¾	18⅜	18⅜
6¼	6	§.25	..	Cdn. Bakeries	nil	..	B5½	A6¼	6
56	46⅝	1.80+*.25	..	Cdn. Bk. Com.	5823	51¾	53½	51½	53
38	31	1.60	4.3	Cdn. Breweries	10293	36½	38	36½	37½
16	10½	..	..	Cdn. Br. Al. A	261	12	11⅝	†10	11⅝
7.05	4.00	..	..	Do. Warr. A	685	4.75	4.90	4.55	4.55
6.60	4.10	..	..	Do. Warr. B	210	4.50	4.85	4.60	4.60
22½	20	1.50	7.5	Cdn. Bronze	560	22½	20½	20	20
80	79	5.00	6.4	Do. Pref.	nil	..	B80	A85	†78
14	12	.75	5.8	Cdn. Canners A	425	13	13⅝	13	13
23	18½	1.00+‡.15	..	Cdn. Celanese	3625	19¾	20	19¾	20
30⅛	28	1.75	5.8	Do. $1.75 Pref.	207	29	†31	28½	30
17½	16	1.00	6.3	Do. $1.00 Pref.	20	17½	16	16	16
7¼	5½	..	..	Cdn. Chem. Lt.	3850	6½	6¾	5¾	6¼
11⅛	7½	..	..	Cdn. Collieries	4275	8¾	8⅞	8⅝	8¾
.85	.72	.05	0.7	Do. Pref.	2085	.73	.74	.72	.74
4	3½	..	..	Cdn. Convert A	nil	..	B3.50	A4.00	4
†4¾	†2	..	..	Do. (B)	nil	..	B4.75	..	†4.75
2.75	1.40	..	..	Cdn. Curtiss W.	7850	1.75	1.80	1.55	1.75
18	14	*.50	..	Cdn. Drawn Stl.	355	17	14	14	14
12¾	10½	.60+*▲▲.19	..	Do. Pref.	250	11	11⅛	11⅛	11⅛
16	13⅛	*.50	..	Cdn. Dredge	725	14	14¼	14	14
10⅞	8⅞	.70	7.2	Cdn. Fairb. A	2825	9¼	10	9¼	9¾
7¾	6	.60	9.8	Do. (B)	975	7	7¼	6⅛	6⅛
3.80	3.10	..	..	Cdn. Food Prod.	200	3.10	3.50	3.25	3.50
9	6½	..	..	Do. (A)	nil	..	B8½	A10	7½
62	45⅛	..	..	Do. 4½% Pref.	325	55	62	55	62
1000	1000	8.00+*4.00	..	Cdn. Gen. Elec.	nil	..	B750	A1180	1000
33¼	28¾	1.20+*.15	..	Cdn. G. Inv.	40	30½	30½	30½	30½
15	13½	*.50+‡■	..	Cdn G. Sec. A	50	14	14	14	14
16	16	*.50+‡■	..	Do. (B)	nil	..	B16	A19	16
12½	9½	.20	1.9	Cdn. Hydrocarb	3020	10	10⅞	10	10½
6½	6½	.10	1.5	Cdn. Ice Mach.	nil	..	B6	A6¼	6½
11½	10½	.80	6.8	Do. (A)	nil	..	B11½	A11¾	†11¾
4.10	3.80	..	..	Cdn. Ind. Gas	4150	3.80	4.10	†3.60	4.00
17¼	13	.50	3.7	Cdn. Indust.	2647	13¼	13⅞	13¼	13⅝
76	69½	3.75	5.4	Do. Pref.	15	†69	70	70	70
40	37¼	1.00+‡.25	..	Cdn. Ingersoll R.	800	40	40	40	40
21	17	*.70	..	Cdn. Int. I. Tr	105	17¾	17	†14	†14
78¾	77½	5.00	6.3	Do. Pref.	5	77½	†80	†80	†80
16	12¼	..	..	Cdn. Int. Pwr.	2501	15½	15½	15	15½
43½	40	3.00	6.9	Do. Pref.	552	42½	43½	43	43½
1.60	.58	..	..	Cdn. Kodiak	56633	.94	1.35	.98	1.16
8	6	..	..	Cdn. Locomo.	30	7	6½	6½	6½
6.50	4.85	..	..	Cdn. Marconi	625	5.25	5.37½	5.25	5.37½
24¾	19¼	.80	3.8	Cdn. Oil	3871	21¼	21¼	20¾	20⅞
†78	†72½	4.00	5.3	Do. 4% Pref.	nil	..	B76	A77	†76
93½	90	5.00	5.5	Do. 5% Pref.	21	†95	91	†87	91
141	138¼	8.00	5.7	Do. 8% Pref.	nil	..	B141½	A144	141
26¼	22⅞	1.50	5.9	Cdn. Pacific	15814	25¼	25½	25	25⅝
13½	8⅝	..	..	Cdn. Petrofina Pfd.	1282	10¼	10⅝	10	10¼
7⅛	5⅜	.20	4.0	Cdn. Pr. & Pa. Sec.	nil	..	B5½	A6¾	†5
2.60	1.90	..	..	Cdn. Propane	150	2.10	2.00	1.90	1.90
39⅛	35	*.20	..	Cdn. Salt	nil	..	B35	A38	35
2.25	.75	..	..	Cdn. Silk A	nil	..	..	A1.00	.75
190	170	.60+*.10	..	Cdn. Tire	115	185	180	177	180
66⅛	63	5.00	5.9	Cdn. Utilities Pf.	nil	..	B85	A88	85
70	70	4.25	5.9	Do. 4¼ Pf.	5	†72	†72	†72	†72
17⅛	12⅝	.60	4.2	Cdn. Vickers	465	14	14¾	14⅜	14⅜
36	27	§1.25	..	Cdn. Wallpaper A	10	28½	29¼	29¼	29¼
40	28	§1.25	..	Do. (B)	nil	..	B29¼	A33	29⅝
15	13½	.80	5.6	Cdn. West. Gas 4%pf.	190	14	14	13¾	13⅝
21	18¼	1.10	5.6	Do. 5½% Pfd.	450	19⅝	19½	19½	19½
16⅛	16	*††.17½	..	Do. Ord.	905	16¼	16¼	16	16⅛
45⅛	38½	1.00	2.6	Cdn. Westinghouse	420	39	39	38⅛	39

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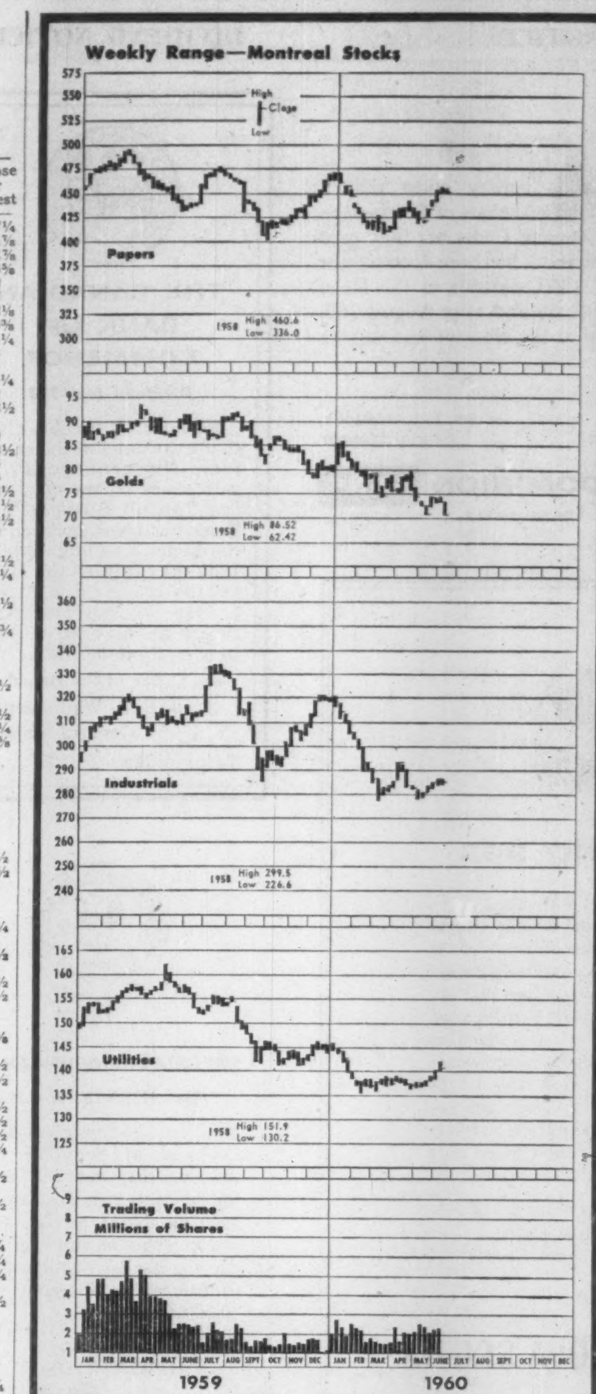
1.20	1.00	..	..	Canarama	nil	..	B1.00	A1.20	1.20
..	..	..	..	Do. Pref.	nil	..	B2.25	A2.75	2.50
..	..	..	..	Do. Warr.	nil	..	..	..	.50
1.40	1.40	..	..	Cantexas A	nil	..	B1.20	A1.35	1.40
10½	9	▲.52	..	Capital Estates	1805	9½	9½	9½	9½
1.00	.85	..	..	Carling Br. Atla.	nil	..	..	A.90	.90
1.00	1.00	..	..	Do. V.T.	nil	..	..	..	1.00
12¾	12	.60+*.35	..	J. B. Carter A	nil	..	B12	A12¾	12½
55	47¼	*2.00	..	Do. (B)	nil	..	B47	..	47¼
40	38	.50+*.50	..	Catelli Food A	150	39½	40	39½	40
63½	60½	2.00	3.3	Chart Trust	nil	..	B60	A63	60½
24	22⅛	1.00	4.3	Chateau-Gai	10	22¾	23¼	23¼	23¼
58	44½	▲1.00	..	Chrysler Corp.	nil	..	B48½	A52	†42
..	..	*1s	..	Cinzano A	nil	..	B1.30	..	†1.10
1.65	1.65	5½%	..	Do. 5½% Pref.	nil	..	..	..	1.65
7	4¼	..	..	Circle Bar Knit	100	7	7	7	7
7	5½	..	..	Do. (A)	nil	..	B7⅛	..	7
20	19	‡■	..	Cochrane-Dun	nil	..	B17	A20	†17
†16	†15	.80	5.3	Do. (A)	nil	..	B16	A17	†15
25¼	12¾	..	..	Cockshutt Farms	320	13¾	13¾	13⅝	13¾
5¼	3½	..	..	B. J. Coghlin	50	4	4¾	3¾	3¾
4.25	2.25	..	..	Cold Lake Pipe	3900	3.30	3.50	3.30	3.50
†14¼	†13½	*1.00	..	Coll. Terminal	nil	..	B13¾	..	†14¼
15	13½	*1.00	..	Do. Pref.	100	13½	15	15	15
4.90	3 75	..	..	Columbia Cell.	5805	4.15	4.20	3.90	4.00
11	7⅝	.60	7.7	Comb. Enter	710	8	8	7⅝	7¾
13⅞	12½	80+*.20	..	Conduits Nat.	225	12⅝	13	13	13
137	134½	2 00	1.5	Conf. Life	nil	..	B136	A155	134½
165	156	..	..	Do. Offered	nil	..	B165	A175	164
9	8	.50	6.1	Cons. Bakeries	100	8¼	8¼	8¼	8¼
95	.75	..	..	Cons. Div. Sec. A	nil	..	B.75	A1.10	†.60
†32	†29	2.00	6.9	Do. Pref.	nil	..	B29	..	†29
..	..	§ 25	..	Cons. Fire Ins.	nil	..	B5.00	A7.00	5.50
20	17	.80	4.1	C. Min & Smelt	10406	18¼	19½	18⅛	19⅝
44½	36½	1.60+*40	..	Cons. Paper	6243	43½	43½	42	42
3.00	2.25	..	..	Cons. Textiles	nil	..	B2.25	A2.50	2 25
20	20	1.00	5.0	Do. Pref.	nil	..	B11¼	A13	20
39⅞	34	1.00	2.6	Consumers Gas	3990	38¼	39½	38¼	39
103	99	5.50	5.3	Do. A Pref	5	100¾	†103½	†103½	†103½
103⅞	99	5.50	5.3	Do. B 5½% Pf.	125	102½	103⅞	103	103⅞
29	22½	1.50	6.0	Consumers Glass	165	25	25	24½	25
42	42	▲1.80	..	Cont. Can.	nil	..	B41¼	A41½	42
7⅜	5¾	.40+‡.10	..	Copp Clark	nil	..	B5¾	A6¼	5¾
18¾	16⅜	1.10	6.4	Corbys Vot.	705	17	17⅝	16⅝	17¼
18	16½	1.10	6.7	Do. B N. Vot.	165	17	17	16½	16½
10⅝	8¾	.50	4.8	Coronation Mtge.	1825	9⅞	10⅜	10⅛	10½
12¾	11½	.70+*.10	..	Cosmos Imp.	450	12¼	11⅞	11½	11⅝
2.00	1.80	*.04	..	Craig Bit	300	1.90	2.00	1.90	2.00
22½	18	*.40+‡■	..	Crain, R. L.	1650	20¼	20¼	20	20
11¾	8⅜	..	..	Creative Tele.	46293	10	11	10	10¼
5	4½	..	..	Credit Accept.	nil	..	..	A5.00	4.70
110	100	*2.50	..	Credit Foncier	10	†96	107	107	107
1.50	1.20	..	..	Crestbrook Tim.	1600	1.25	1.25	1.20	1.25
16½	16	..	..	Do. Pref.	25	†15	†16	†16	†16
.06	.06	..	..	Do. Warr.	nil	..	B.06	A.16	.06
55	46	2 00+*.25	..	Crown Cork	25	49	48¾	48¾	48¾
29	25	1.00	3.8	Crown Trust	40	25½	26¼	26¼	26¼
50½	42	▲1.80	..	Crown Zeller	321	44	43½	43	43
20⅛	17½	1.00	5.1	Cr. Zell (Can.) A	1835	20	20⅛	19½	19½
19½	15½	.60	3.3	Crow's N. Coal	nil	..	B16¼	A18	18
9¾	7½	.20	2.6	Crush Int.	1140	8	7⅞	7¾	7¾
104½	99½	6.50	6.3	Do. 6½% A Pf.	50	104	104	103¾	103¾
				D					
85	83	7.00	8.1	Dalex Co. Pref.	5	85	†86	†86	†86
1.75	1.00	..	..	Dalfen's Ltd.	2850	1.00	1.00	1.00	1.00
45	43	3.00	6.8	David & Fre. A	nil	..	B43	A45	44
..	..	§5.00	..	De Havilland A	nil	..	B180	A299	190
31½	27⅞	1.20+‡.50	..	Distill-Seagram	7790	29½	29½	28⅞	29
..	..	*10.00+8.00	..	Dom. Ang. Inv.	nil	..	B500	..	535
†93	†93	5.00	5.4	Do. Pref.	nil	..	..	..	†93
21	17¾	.80+*.20	..	Dom. Bridge	4110	18⅞	19⅛	18½	18½
4.25	3.00	..	..	Dom. Coal Pref.	nil	..	B2.00	A3.25	3.25
17½	16	1.00	6.3	Dom. Corset	25	16	16	16	16
13½	9⅝	.40	3.6	Dom. Dairies	1595	13¼	12½	11	11
†36	†22	1.75	7.1	Do. Pref.	10	†24¾	†24¾	†24¾	†24¾
9½	6¾	*.10	..	Dom. Electro	395	7⅛	7¼	6¾	6¾
5.45	3.50	..	..	Do. Warr.	nil	..	B3.60	A4.25	3.75
19	16	1.00	6.3	Dom. Engineer	50	16¾	16	16	16
†12	†9	.60	6.0	Dom. Fabrics	65	†9	†10	†10	†10
20	20	1.50	7.1	Do. 2nd Pref.	25	†20⅝	†21	†21	†21
52	42½	1.40	3.2	Dom. Fdry.	4305	45¼	45	42⅞	43½
99	97	4.50	4.6	Do. 4½% Pf.	130	98	98¼	98	98
90	71	2.20+‡.60	..	Dom. Glass	765	76	77½	76	77
14	12⅝	.70	5.3	Do. Pref.	nil	..	B13½	..	13⅛
310	310	8.00	2.3	Dom. Insur.	5	310	†350	†350	†350
8	6¾	..	..	Dom. Magnes.	170	7	7	7	7
40½	34½	2.00+‡.20	..	Dom. Oilcloth	1060	37	36¼	34½	34½
33	29½	.80+‡.20	..	Dom. Scot. Inv.	200	30½	30½	30½	30½
42	40¼	2.50	6.2	Do. Pref.	nil	..	B42	A48	40½
15⅞	12¼	.40	3.0	Dom. St. & Co.	1130	13⅛	13¾	12⅞	13¼
55	41	1.25	2.3	Dom. Stores	7556	49	53⅝	48½	53⅝
16¼	13½	.60	4.2	Dom. Tar & Ch.	22995	13⅝	14⅛	13½	14⅜
19¼	18½	1.00	5.2	Do. Pref.	184	19¼	19¼	†17½	19¼
10⅝	8⅝	.60	6.0	Dom. Textile	6367	9½	10	9¾	10
125	110	7.00	5.7	Do. Pref.	nil	..	B122	A131	122
16	13⅞	.60+*.15	..	Donohue Bros.	400	15	15½	15	15
13½	11½	*.60+‡■	..	Dover Ind.	40	11½	†11¼	†11¼	†11¼
9	9	.60	6.7	Do. Pfd.	nil	..	B9	A10	9
45¼	45	1.50	3.3	Dow. Brew.	55	45	45¼	45	45¼
26¼	20⅝	.50	2.2	Du Pont of Can.	2152	23⅛	23½	22¼	22¾
76	71	3.75	5.3	Do. Pfd.	10	†68½	71	71	71
7⅝	6½	.55	8.1	Dupuis Fre. A	125	6¾	6¾	6¾	6¾
				E					
10	7	..	..	East Koot Pr.	165	10	9⅛	9⅛	9⅛
130	116	7.00	5.4	Do. Pref.	nil	..	B121	..	130
..	..	4.00+‡1.50	..	East Baker 4% Pf.	nil	..	..	..	†80
17¼	17	1.00	5.9	Easy Wash. 5% Pf.	nil	..	B17¼	A18	17
39½	37	1.20+‡.40	..	Economic Inv.	25	37½	37¼	37¼	37¼
29½	26½	1.50	5.3	Eddy Match	20	28½	28½	28½	28½
68	50½	1.50	2.5	Eddy Paper	180	62	61	60	61
68¾	51	1.00	1.6	Do. (A)	100	62	61	61	61
3.00	2.80	16+‡.04	..	Edmon. Concr.	100	2.80	2.95	2.95	2.95
..	..	..	..	Electra Invest.	nil	..	B.98	..	1.25
20	17	▲1.20	..	Electrolux	1035	18⅛	20⅛	19	19
12	10	.50	5.0	Emco Ltd.	25	10	10	10	10
58	55	*1.00	..	Empire Life	nil	..	B56½	A57½	56½
10	9	.50	5.6	Enam. & Heat. A	300	9	9	9	9
5¾	5	..	..	Do. (B)	nil	..	..	A5.00	†3.05
55	53	*.65+.25	..	Equitable Life	nil	..	B43½	A58	53
6¾	5	.60	10.0	Erie Flr & Wood A	100	5	6	6	6
1.00	1.00	..	..	Do. (B)	nil	..	B1.00	A2.73	1.00
				F					
21½	18⅛	1.50	7.9	Fam. Players	1346	19	19	18⅛	19
17	15	▲1.00	..	Fanny Farm	250	15¾	16	15⅞	16
..	..	*2.00+1.00	..	Fed. Fire 25% Pd.	nil	..	B36½	..	42
48	39	1.40+*.25	..	Federal Grain A	15	42½	44	43¾	44
27½	25½	1.40	5.3	Do. Pref.	nil	..	B26⅜	A27	26⅜
1.00	1.00	..	..	Feralco	nil	..	..	A.75	1.00
..	..	..	..	Fibre Products	nil	..	B6	A7½	†9
6⅛	6½	..	..	Do. Pref.	nil	..	B5½	A6½	6½
9	8⅛	.80	10.0	Finlayson A	nil	..	B8	A10	8⅛
10½	10¼	.70	7.8	Do. (B)	nil	..	B9¾	A10¼	†9
8	6	..	..	Fittings	nil	..	B6½	A8	†8½
9½	9	.60	6.7	Do. (A)	nil	..	B8½	A9¾	9
.80	.43	..	..	Fleet Mfg.	3800	.45	.56	.52	.54
11⅛	9¼	*♦♦.13¾	..	Fleetwood Corp.	600	10½	10¼	10	10
88½	63	▲2.40+‡.60	..	Ford Mot. (U. S.)	225	66	67½	65¾	67¼
173½	140	5.00	3.5	Ford (Can.) A	135	140½	143½	141	142
3.50	2.50	..	..	For. Pr. Secs	nil	..	B2.65	A3.50	2.70
12	9	.50	5.1	Foundation Co.	2515	9¾	10	9½	9¾
28¾	24½	1.20+*.30	..	Fraser Cos.	1460	26¼	27½	26¼	27⅛
†32	†32	1.00+*50	..	Freiman	nil	..	B33	..	†32
97	88⅞	4.50	4.9	Do. Pref.	nil	..	B89¾	..	92
15⅝	13⅝	.60+*.05	..	C. E. Frosst A	2071	14⅝	15⅛	14½	15
6.75	4.90	..	..	Fruehauf Tr.	220	†4.80	5.25	†4.80	4.90
				G					
36⅞	32	1.60	4.5	Gatineau Pwr.	2865	35¾	35⅞	35⅜	35½
99	90	5.00	5.1	Do. 5% Pref.	630	96½	99	97	99
102⅛	99½	5.50	5.4	Do. 5½ Prd.	905	101	102	101½	102
9	7	*.20	..	Gen. Bakeries	nil	..	B7½	A7¼	7
22	13⅜	§■	..	Gen. Develop	2790	14⅛	14⅛	13⅞	13⅞
50½	37	▲2.00	..	Gen. Dynamics	1020	42	43⅞	40½	43
91½	91½	▲2.00	..	Gen. Elec.	34	†89	91½	91½	91½
53¾	41½	▲2.00	..	Gen. Motors	671	43¼	44⅞	43¼	44½
31½	28	*■	..	Gen. Products A	nil	..	..	A28	28
..	..	*■	..	Do. (B)	nil	..	B34	..	†30½
16½	10½	.40	3.7	Gen. St. Wares	400	10¾	11	10¾	10¾
87	84½	5.00	5.9	Do. Pref.	nil	..	B85½	A88	85
180	140	4.00+‡2.00	..	Goodyear Tires	125	143	145	135	135
43	40½	2.00	4.7	Do. Pref.	1020	43	†43¼	43	43
6¾	6¼	.50	8.0	Gord. Mackay A	375	6⅜	6½	6¼	6¼
8	6	.50	6.3	Do. (B)	nil	..	B7½	A8	8
16⅛	14½	1.00	6.7	Grafton A	nil	..	B14½	A15	15
..	..	*.20	..	Do. (B)	nil	..	..	..	..
50	48	1.80	3.8	Grand & Toy	nil	..	B42	..	48
44¾	34⅞	1.60	3.8	Gt. Lakes Pap.	4780	43⅛	42	41⅜	41⅝
26	22	..	..	Gt. Lakes Pwr.	100	24⅞	25	25	25
7.25	5.25	..	..	Do. Warr.	nil	..	B5.75	A6.95	6.00
23½	19	1.25	5.3	Do. Pref.	130	†23¾	†23¾	23½	†23¾
6¼	5¼	.20	3.6	Gt. North Gas	300	5⅝	5¾	5⅝	5⅝
2.25	1.25	..	..	Do. Warr.	2335	2.00	1.75	1.55	1.75
37½	35½	2.50	6.6	Do. Pref.	25	†37½	38	38	38
41½	39½	2.80	7.0	Do. $2.80 Pref.	40	41½	41	40	40
2.35	1.50	..	..	Do. B Warr.	1440	1.60	1.75	1.60	1.75
5.00	4.50	.50	11.1	Gt. West Coal A	500	4.70	4.65	4.50	4.50
3.85	3.00	*.12½	..	Do. (B)	200	3 00	3.00	3.00	3.00
331	300	5.00	1.5	Gt. West Life	55	315	330	320	330
6.75	3.50	*■	..	Gt. W. Saddlery	1465	4.00	4.15	3.50	3.55
11¼	8¼	..	..	Gt. Winn Gas	8154	8⅞	9½	8¾	9¼
1.05	.27	..	..	Do. Rts.	94730	.51	1.05	.48	1.05
11	8	..	..	Do. V.T.	5173	8⅝	9¼	8⅝	9⅛
4.80	2.75	..	..	Do. 1956 Warr.	1020	2.75	3.25	2.50	3.25
5.55	1.50	..	..	Do. 1958 Warr.	440	2.50	3.00	2.25	2.50
4.25	3.50	.20	5.7	Greening Wire	nil	..	B3.25	A3.75	3.50
11½	10½	.75	6.9	Greyhound Lines	375	11⅛	11	10⅞	10⅞
8	6½	.40	5.8	Growers Wine A	300	7½	6⅞	6⅞	6⅞
27	25¾	.80	3.0	Guaranty Trust	670	26	27	26	27
10	9¼	..	..	Gurney Prod. Com.	nil	..	B9½	A10	10
28¾	25⅛	..	..	Do. Pref.	nil	..	B27	A29½	28¾
				H					
12½	10	.60	5.7	Hahn Brass	nil	..	B10	A11	10½
15	15	.90	6.0	Do. 1st Pref.	nil	..	B15	A16	15
16⅛	16	.90	5.6	Ham. Cot.	nil	..	B16¼	A17	16
†83	†83	5.00	6.0	Do. 5% Pfd.	nil	..	B81	..	†83
11¾	9	..	..	Handy Andy	550	15	15	14½	14½
105	98	6.50	6.2	Hardee Farms	1455	11	11¾	11	11¾
15¾	12	*♦♦.10	..	Do. Pref.	55	103	105	105	105
15¼	10½	.60+*.10	..	Harding Carpet	460	11⅝	11⅝	10½	10½
13	11	.50	4.4	Hartz, J. E. A	250	11	11¼	11¼	11¼
26	23	§1.50	..	Hayes Steel	315	23¼	23½	23¼	23½
5	3¼	..	..	Hees, Geo. H.	nil	..	B1¼	A3¾	3¼
9¼	7⅝	..	..	Hendershot Pap.	nil	..	B4.20	..	9¼
97	75	*■■3.00	..	Do. Pref.	90	94¼	94¼	94¼	94¼
4.00	2.45	..	..	Hillcrest Coll.	nil	..	B4.00	..	4.00
55	50	1.80	3.4	Hinde & Dauch	50	55	53⅛	53⅛	53⅛
8	5½	..	..	Holden Mfg. A	nil	..	B6⅛	A7½	6
3.00	3.00	..	..	Do. (B)	nil	..	B2.50	A4.95	3.00
17½	14	.60	3.8	Holt Renfrew	325	15	16	15¾	16
5.00	3.30	*♦♦.07½	..	Horne & Pitfield	1000	3.40	3.50	3.30	3.40
25	21	.50	2.4	Horner, F. W. A	105	20½	20½	20½	20½
44½	35½	1.20	3.1	H. Smith Pap.	1210	39¼	39¼	38½	39¼
39½	35½	2.00	5.2	Do. Pref.	275	38½	39	38½	38½
†8	†7½	*.75	..	Hubbard Felt	nil	..	B7¾	..	†7½
20	19⅛	1.50	7.1	Do. (A)	80	20	†21	†21	†21
11½	10¼	.80	8.0	Hughes-Owen A.	nil	..	B10¾	A11½	†10
..	..	.40	2.9	Do. (B)	nil	..	B10	A14½	14
25½	25½	1.60	6.3	Do. Pfd.	nil	..	B25½	..	25½
59	48	1.90	3.6	Huron-Erie	125	53	53	53	53
				I					
63	52	1.60+‡.35	..	Imperial Bk.	1365	55¾	57½	55	57½
37	34½	1.50+‡.10	..	Imperial Flo-Glaze	nil	..	B36¼	A37	36
10	8	.50	5.1	Imp. Invest A	1965	9⅞	10⅛	9⅞	9⅞
19¾	19½	1.25	6.3	Do. 6¼% Pref.	nil	..	B20	A20	19¾
23	20¾	1.40	6.7	Do. $1.40 Serp.	20	21½	21	21	21

Where there have been no transactions during the week covered, the word "nil" is shown under sales and the quotations shown are the bid, ask, and last sale price, instead of high, low, and close.

Range 1960 High	Low	Div. $	Y'ld R'teJun10 %	Company	Sales	Last May 3	Week end. June 10 High	Low	Close or Latest
79	73	2 40	3.1	Imperial Life	45	74	77¼	75	77¼
37	30	1.20	3.8	Imperial Oil	17636	31⅛	32⅝	31	31⅞
12⅞	11¼	.50+*17½	..	Imperial Tob.	7950	12⅛	12½	11⅞	11⅞
5⅞	5¼	6%	4.0	Do. 6% Pref.	2550	5½	5⅝	5⅝	5⅝
39⅝	31	*.85	..	Indust. Accept.	6765	38⅞	39¼	37¾	39
88	78⅝	2.25	2.6	Do. 4½% Pfd.	65	86	88	86	87
42⅛	39⅞	4.50	10.1	Do. 4½%Pf.$2.50P.	20	†47½	42⅛	42⅛	42⅛
51	48	2.75	5.5	Do. 5½% Pref.	110	50	50⅜	50⅜	50⅜
14⅜	8½	..	..	Do. Warr.	3210	13¾	14¼	13	14¼
6	5½	.50	8.3	Ingersoll Mach. A	nil	..	B5½	A7	6
6.25	4.60	..	..	Inglis John	1300	4.80	5.00	4.65	4.70
..	..	..	..	Ingram & Bell	nil	..	B8	A10	6¼
12	12	.60	5.0	Do. Pref.	nil	..	B12	A12½	12
21¼	17	.60	2.7	Inland Cem. Pf.	201	18¼	18½	17	18½
2.30	1.50	..	..	Inland Chem.	700	1.50	1.60	1.50	1.50
6.37½	4.00	..	..	Inland Nat. Gas	1805	4.00	4.25	4.10	4.10
14¾	13¼	1.00	7.4	Do. Pref.	1200	14	14	13½	13½
1.75	.95	..	..	Do. Warr.	1325	1.00	1.05	.95	.95
4.00	3.00	‡.06	..	Interior Brew. B	250	3.25	3.10	3.00	3.00
16	13½	.70	5.2	Inter. Bronze	200	†13¼	13½	13½	13½
23½	20	1.50	7.0	Do. Pref.	nil	..	B21⅝	A32	21½
55⅜	50	*††.37½	..	Inter Nickel new	14375	55⅝	55⅝	55¼	53½
†10⅛	†9	..	..	Inter Paints A	nil	..	..	A12	†9
†20	†17	1.20	7.1	Do. Pref.	nil	..	..	..	†17
130	96½	▲3.00+‡■	..	Int. Paper	987	98¾	107	99	105½
†83¼	†83¼	▲4.00	..	Do. Pref.	nil	..	..	..	†83¼
43	42	▲1.20	..	Int. Pete.	nil	..	B43	A52	43
36⅜	31	▲1.40+‡▲.15	..	Int. Util.	2380	35	35¾	35	35½
43	39⅛	▲2.00	..	Do. Pref.	390	40⅝	41	40¼	41
9½	6¼	§.65	..	Interp. Bld. Cr.	200	6¼	6	5¾	5¾
1.25	.40	..	..	Do. Warr.	nil	..	B.46	A.85	.50
60	52¼	2.20+‡.25	..	Interp. Pipe	2787	56⅛	57½	56¼	57
5.50	4.30	..	..	Interp. Steel	165	4.70	4.70	4.65	4.65
40	38	2.40	6.4	Invest Foundation	nil	..	B38	A49	†37½
50½	50½	3.00	6.0	Do. Pref.	nil	..	B50½	A57½	†50
41⅛	32	*.35	..	Invest. Synd.	121	33½	33½	33½	33½
38	23	*.35	..	Do. (A)	2420	23⅛	26⅞	23⅝	26¼
14⅝	11¾	..	..	Iroquois Gl. Pfd.	2330	13⅞	14⅛	13⅝	13⅝
				J, K, L					
35	27½	.90	3.1	Jam. Pub. Ser.	1710	28⅛	29	28⅛	29
103	103	7.00	6.8	Do. Pref.	nil	..	B103	..	103
7¼	5	..	..	Jefferson Lake	2300	5¼	6	5	6
2.55	2.05	.10	4.5	Jockey Club	6125	2.10	2.25	2.10	2.25
45	.32	..	..	Do. Warr.	4500	.33	.35	.31	.32
9¼	8¼	.55	6.5	Do. 5½% Pref.	325	†9½	8½	8½	8½
9½	9	.60	6.3	Do. 6% Pref.	250	9½	9½	9½	9½
60	44	▲2.00	..	Johns-Man.	nil	..	B61	A61½	60
9¾	9	.60	6.7	Johnston 6% Pf.	nil	..	B9	..	9
..	..	§.40+‡.20	..	Journal Pub.	nil	..	..	..	29
7½	5⅞	.25	4.0	Kell. Doug. A	1360	6⅛	6¼	6	6¼
3.95	2.65	..	..	Do. Warr.	600	3.00	3.10	3.00	3.10
10⅛	7	..	..	Kelvinator	175	7¼	7½	7½	7½
..	..	..	..	La Comp. Fon.	nil	..	..	A90	†45
28	24	1.20	4.4	Labatt, John	1930	27½	27½	26½	27½
8	7½	..	..	Lafarge Cem. A	200	†7	7½	7½	7½
1.01	.74	..	..	Do. Warr.	1245	.90	1.00	.80	1.00
9¾	8¼	..	..	Do. (A)	375	9	9	9	9
130⅝	114	7.00	5.4	L. of Wood Pfd.	nil	..	B130	A135	130⅝
2.80	1.90	..	..	Lakeland Nat. Gas	1925	2.00	2.00	1.90	1.90
13⅝	12	.80	5.9	Lambert, Alf. A.	150	12¾	13½	13	13½
..	..	.80	6.4	Do. (B)	nil	..	B13	..	12½
32½	32	*1.30	..	Lambton Loan	nil	..	B32	A32¾	32
..	..	*▲.35+■	..	Latonia	nil	..	B23⅛	A24⅜	†22½
28¾	24	*.60+.25	..	Laura Secord	560	26½	27½	26½	26½
12½	12½	.50+.10	..	Laur Accept. A	nil	..	B12½	A14	12½
22	19¼	1.00	5.1	Lawson & Jones A	50	20	19¾	19¾	19¾
30	30	1.00	3.3	Do. (B)	5	30	30	30	30
10½	10½	.60	5.7	Lewis Bros.	10	10½	10½	10½	10½
105	90	2.16	2.2	Loblaw Groc.	nil	..	B92	A100	100
29	26	1.50	5.3	Do. A 1st Pref	130	28¾	28¾	28	28½
51½	46	2.16	4.7	Do. 2nd Pref.	nil	..	B46	..	46
30⅛	27	1.60	5.3	Do. 1st Pref. B	1235	29½	30⅛	30	30
27½	22½	.40	1.5	Loblaw Comp. A	1607	25½	26½	25½	26¼
28	22¾	.40	1.5	Do. (B)	1103	26½	26¾	26	26¾
46	40	2.40	5.3	Do. Pref.	620	44¾	46	44¾	45¾
9.00	5.00	..	..	Do. A Warr.	515	5.50	5.80	5.50	5.80
13⅛	9½	*▲.15	..	Loblaw Inc.	1300	12¼	12½	12¼	12½
1 00	.94	..	..	Locano Min.	2000	.95	.95	.94	.94
1.50	1.50	..	..	Lochabar	nil	..	B1.50	..	1.50
7⅞	6	*♦♦.10	..	M. Loeb Ltd.	1500	7⅛	7	6⅞	7
1.25	.90	..	..	Lon Hose	165	†.70	1.10	1.00	1.10
3.50	2.50	§.40§§	..	Do. (A)	170	3.00	3.50	3.40	3.50
31	29¼	1.00	3.3	Lr. St. Law. Pwr.	100	31	30¼	30¼	30¼
27½	23¾	1.00	3.8	Lowneys	175	25¼	26	25½	26
				M					
†9	†9	..	..	Mackin Steel	nil	..	B5	A9	†9
94	94	5.00	5.3	Do. Pref.	nil	..	B94	..	94
90	75	2.00+*.75	..	Maclaren Pr.	805	82	90	82	84
23½	21¾	1.20+*▲▲.42	..	Macleod's A Pfd.	50	23	23	23	23
18⅝	14¼	.60+*.08	..	MacM. & B.P.R.	22354	16	16½	15¾	16
16	16	..	..	Magnum Fund	nil	..	B15	..	†15
25⅛	22½	1.20	4.4	Maher Shoes	25	25⅛	†27	†27	†27
†25	†24½	.60	2.4	Mailman Corp.	nil	..	..	B25	†24½
89	85	5.00	5.9	Do. Pref.	25	89	85	85	85
25	25	1.00	4.0	Do. C.C. Pref.	nil	..	..	..	25
5½	5¼	.40+‡.10	..	Man. & Sask. A	nil	..	..	A6	5½
..	..	40+‡.10	..	Do. (B)	nil	..	B6	..	6¾
90⅛	85	6.00	6.7	Man. Sugar Pref.	nil	..	B90⅛	A94	90⅛
27	26	1.20	4.3	M.L. Gardens	nil	..	B28	A30	†28
14½	11¼	.50	3.7	Maple Leaf M.	460	14	13½	13¼	13½
89	85	5.00	5.6	Do. Pref.	5	89	†90	†90	†90
12⅛	8¾	.40	4.0	Massey-Ferg.	53579	9⅛	10⅛	9⅛	10
103	97¾	4.50	4.7	Do. 4½% Pref.	27	93½	98½	†96	†96
102	93½	5.50	5.6	Do. 5½% Pref.	2536	98⅞	100½	98¾	99
4.85	3.25	*.20	..	Maxwell Ltd.	25	3.25	3.25	3.25	3.25
14	14	1.00	7.1	McBrine Pref.	nil	..	B12¾	A15	14
33	32	*.65	..	McCabe Grain	nil	..	B26	A30	32
..	..	.50	7.7	W. G. McMahon	nil	..	B6¼	A7¾	6½
8	7½	..	..	Melchers	nil	..	..	A7¾	7½
11⅞	11½	.60	5.1	Do. Pref.	nil	..	B11½	A12	11⅞
19¼	13	1.00+*■	..	Mexican Lt.	421	19	18⅞	18¼	18⅞
13⅞	12½	1.00	7.9	Do. Pref.	75	13⅛	12⅝	12⅝	12⅝
16½	16½	1 00	6.1	Mid Pac. Grain	25	16½	16½	16½	16½
2.05	1.50	..	..	Midwest Ind.	6230	1.50	1.60	1.50	1.50
2.80	2.40	.20	8.3	Milton Brick	200	2.45	2.40	2.40	2.40
32¾	27¼	▲1.60	..	Minn. & Ont. P.	340	29¾	30	29½	30
21	21	1.25	6.0	Mitchell, J. S.	nil	..	B20	..	21
13	10¾	1.00	8.0	Mitchell, Robt. A.	75	12½	12½	12½	12½
6	..	..	..	Do. (B)	nil	..	B6	A6½	6
15½	13½	1.00	6.9	Mod. Contain A	800	13½	15	14¼	14½
26¼	20½	.90	3.7	Molson Brew A	1658	22⅝	24½	22½	24¼
26	20	.90	3.7	Do. (B)	2782	22¼	24½	23	24½
41¼	39½	2.20	5.4	Do. Pref.	395	41	41¼	40½	40½
56	42½	§■	..	Molybdenum	120	47½	49	48	48
..	..	..	..	Do. Warr.	nil	..	..	..	35
50¼	45	2.00	4.4	Monarch Inv.	nil	..	B45	A50	45
9¼	8	..	..	Monarch Knit	nil	..	B8⅛	A8¾	8⅛
89	83	4.50+*■■7.50	..	Do. 4½% Pref.	nil	..	B65	A83	†75
55	47	.80	1.6	Monarch Life	nil	..	B46	A50	50
18	15½	1.00+*.35	..	Montreal Locom.	1105	16	16	15¾	15¾
†17	†17	..	..	Mont. Refrig. A	nil	..	B17	A18½	†17
†19¼	†19¼	2.00+‡■	..	Do. (B)	nil	..	B18	A24	†19¼
46	42	1.40+*.40	..	Mont. Trust	nil	..	B42⅝	..	42¾
..	..	*1.75	..	Montrose Inv.	nil	..	B25	..	11½
47⅜	35½	▲.80	..	Moore Corp.	12331	45¼	47⅜	45	47
†1848	†1848	▲7.00	..	Do. A Pref.	nil	..	B2808	..	†1848
..	..	▲7.00	..	Do. B Pref.	nil	..	B3212	..	..
34	26	1.00	3.7	Morgan H.	nil	..	B27	A28	27¼
91	86½	4.75	5.5	Do. 4¾% Pfd.	25	86½	86½	86½	86½
10¼	6	*■	..	Mt. Royal Dairy	1205	6¾	6⅞	6	6
23	19	1.00+*.25	..	Mt. Royal Rice	nil	..	B20½	A20¾	20¾
10¼	10	§.50	..	Mussens Can.	30	10	†8	†8	†8
				N					
16¾	13⅞	.80	5.3	Nat. Drug.	2275	14¾	15	14½	15
16¼	13	.60	4.1	Do. Pref.	40	14¼	14½	14½	14½
24	24	.60	2.5	Nat. Grocers	50	†23	24	24	24
27¼	25⅞	1.50	5.6	Do. Pref.	100	26	27	27	27
†3.85	†3.85	.20	5.2	Nat. Hosiery A	nil	..	B3.50	..	†3.85
4.00	2.05	*.16	..	Do. (B)	nil	..	B2.25	A2.50	2.25
..	..	*▲1.50	..	Nat. Lead	nil	..	B95¼	A96¼	113
19¾	12	.80	5.8	Nat. Steel Car.	973	13¾	14	13½	13¾
52	49	1.60+‡.20	..	National Tr.	415	51	52	51	52
17¼	14¼	.60	4.1	Neon. Prod.	290	14½	14¾	14½	14¾
52	43½	2.00	4.4	Nfld. Lt. & Pwr	165	45	45	45	45
12	11	.60+*.20	..	Niag. W. Weav.	76	11	11⅛	†9	11⅛
11⅞	10⅜	.60+*.20	..	Do. (B)	nil	..	B11¼	A11⅞	11
48⅞	36½	2.00	5.4	Noranda	9365	38	38½	36½	36¾
34⅞	22¼	.60	1.8	North Star Oil	nil	..	B34	..	34
47	41	2.50	5.3	Do. Pref.	370	47	†48	47	47
3.75	1.00	..	..	Do. S.P. Warr. '57	7920	3.55	3.60	3.55	3.55
19¾	17⅜	.60	3.2	Do. (A)	195	19½	19½	19	19
16⅜	11⅜	..	..	Nth. Ont. N. Gas	5855	12	13⅜	12	13⅜
26	24⅝	1.60	6.4	North Que. Pwr.	90	25	25	25	25
45	43	2.75	6.0	Do. Pref.	nil	..	B44¾	A46¾	†46
3.70	3.15	*.05⅓	..	North Tele.	2335	3.55	3.60	3.45	3.50
1.10	.77	..	..	Do. Warr.	nil	..	B.75	A.93	.90
16¼	15½	*.25	..	Northland	750	16	16¼	16	16
5	4	*.16	..	Northwest Ind.	nil	..	..	A4	4¼
72½	69½	4.00	5.7	Northwest U. Pf.	20	70	71	70	70
14¼	13	.60	4.2	Nova Scotia Lt.	1540	13¾	14¼	14	14¼
				O, P, Q					
†14½	†14¼	..	..	Oakville Wood	25	†14½	†14½	†14½	†14½
13	10	.60	5.2	Ocean Cem.	300	11¼	11½	11½	11½
17	13	.80	5.7	Office Spec.	300	14¼	14	14	14
46½	40	2.00+‡.25	..	Ogilvie Flour	245	43	43	42	43
140	125	7.00	5.4	Do. Pref.	90	125	130	125	130
4.40	3.30	*.15	..	Okan Helicopters	947	4.20	4.20	4.05	4.10
12¾	11	.60	5.0	Okanagan Tel.	500	11½	12	12	12
†.70	†.60	..	..	Ont. Beauty S.	nil	..	B.75	..	†.70
10	9¾	*■■.25	..	Do. Pref.	nil	..	B8¾	..	†10¼
29	25⅝	1.00+*.20	..	Ontario Loan	nil	..	B27	A27	27
24	20	1.00+*.40	..	Ontario Steel	75	†19	21	20	20
121½	121½	7.00	5.8	Do. Pref.	nil	..	..	A124	121½
7½	6½	*♦♦ 10	..	Oshawa Wh. A	950	7	7	6⅞	7
7½	6⅝	..	..	Overland A	30	†6¼	6⅝	6⅝	6⅝
9	8½	.60	6.8	Do. Pref.	350	8¾	8⅞	8¾	8⅞
†2.90	†2.90	*.06	..	Pac. Atlantic	nil	..	..	A3.00	†2.90
70	70	1.00+*1.50	..	Pac. Coast Tms.	nil	..	B65	..	70
29	23¼	.90	3.6	Page Hersey	7702	24	25½	23¼	25
†9½	†9	*.40	..	Paton Mfg.	nil	..	B8	..	†9
†21	†21	1.40	6.7	Do. Pref.	nil	..	B20	A22½	†21
8¼	7	§.50	..	Paul S.S.	300	8¼	7	7	7
8½	6⅝	..	..	Pembina Pipe	1105	7¼	7⅜	7¼	7⅜
42	40	2.50	6.1	Do. 5% Pref.	70	41	41	40	41
31	27¾	1.80	6.3	Penmans	85	28½	28½	28	28½
102	100	6.00	5.9	Do. Pref.	nil	..	B102	A105	101
22	19	.60+*.10	..	People's Cr. Jr.	100	19	19	19	19
†95	†94	6.00	6.4	Do. Pfd.	5	†94	†94	†94	†94
16	13	*.40	..	Photo Eng.	115	13	13¼	13	13¼
55½	44	2.00	4.3	Power Corp.	421	47	47¼	46¼	46¼
43	39	2.25	5.2	Do. 1st Pref.	1500	43	43	43	43
66	62	3.00	4.7	Do. 2nd Pref	10	63	63½	63½	63½
3.65	2.85	..	..	Prairie Pipe	1000	3.00	3.00	†2.05	2.90
9¾	7¼	..	..	Premier Stl.	2200	9⅝	9¾	9¼	9¼
155	155	8.00	5.2	Premier Trust	5	155	155	155	155
4.35	2.65	..	..	Prem. Iron Ore	300	2.90	3.00	2.85	2.95
1.40	.46	§.10	..	President Elec.	1900	.47	.47	.47	.47
.00¾	.00½	..	..	Do. Rts.	6000	..	.00¾	.00½	.00½
47	38¼	2.00	4.7	Price Bros.	2187	43½	43¾	42½	42½
84	75	4.00	5.3	Do. Pref.	25	75	75	75	75
..	..	..	..	Propane Credit A	nil	..	..	A.30	.85
15	13⅝	1.00	7.1	Prov. Transport	405	14½	14	13⅞	14
41	40⅜	2.50	6.3	Do. 5% Pref.	5	40⅝	†40	†40	†40
18	10¾	..	..	Quebec Nat. Gas	2775	11	11⅝	10¾	11⅝
5.80	3.05	..	..	Do. Warr.	2599	3.05	3.45	3.20	3.40
80¼	72	..	..	Do. Units	680	73	73	72	72
36	33½	1.60	4.4	Quebec Power	611	35½	36	35½	36
33½	30	.90	2.9	Que. Telephone	537	32	31⅝	31¼	31½
..	..	.75	0.4	Do. (A)	nil	..	..	..	180
14¼	11½	..	..	Do. Warr.	5	12	†11	†11	†11
20⅞	18½	1.10	5.4	Do. 5½% C. Shs.	300	†20	20⅞	20½	20½
..	..	*▲▲.15	..	Quinte Milk Com.	nil	..	B4.10	..	†4.05
†12	†11¼	.60+▲▲*.15	..	Do. (A)	nil	..	B11¼	A13	†11¾
				R					
16	16	1.10+‡.10	..	R. & M. Bear A	125	†15	†14½	†14½	†14½
14¾	13¾	.60	4.0	Rapid Grip	350	†15	†15	†15	†15
28	18	*.30	..	Reichhold	120	18	18	†17¼	18
16¾	14½	*.25+.05	..	Reitman's	1855	15½	16	15½	15½
15	12½	*.25+.05	..	Do. (A)	1861	14	14	13	13
16⅛	16	1.10+*.20	..	Renold-Ch. A	nil	..	..	A16	16
83	80	4.75	5.9	Reynolds-Alum. Pf.	15	81	81	81	81
7⅛	7⅜	..	..	River S. Mill A	nil	..	..	A7¾	7⅜
..	..	..	..	Do. (B)	nil	..	..	A3.00	2.00
15⅛	14½	1.00	6.5	Robertson J.	75	15	15½	15½	15½



Range 1960 High	Low	Div. $	Y'ld R'teJun10 %	Company	Sales	Last May 3	Week end. June 10 High	Low	Close or Latest
17¼	16	.80	5.3	P. L. Robertson	115	†15	15	15	15
17	15¼	1.00+*▲▲.15	..	Do. 2nd Pfd.	240	15¾	17	16½	16½
19½	18	1.20	6.3	Do. 1st Pf. A	nil	..	B18	A19¾	19
4	3½	..	..	Robinson Cotton	nil	..	B2.10	A4.00	3½
..	..	..	..	Do. Pref.	nil	..	B1.65	..	2.00
13¾	13	.80	6.2	Robinson Little	nil	..	B13	A13½	13
15½	15½	1.00	6.5	Do. (A)	nil	..	B15½	A16	15½
6.87½	4.85	§.40§§	..	Roe A. V. Can.	6070	5.00	5.50	5.00	5.37½
80½	66	5.75	7.7	Do. 5¾% Pfd.	150	70	74½	70	74½
36	30¾	1.00+*.25	..	Rolland Pap. A	225	35	36	35	36
41¼	34½	.60+*.25	..	Do. (B)	10	41¼	41	41	41
†73½	†70	4.25	5.8	Do. Pref.	nil	..	B72	A78	†73½
80	66	2.10+‡.30	..	Royal Bank	5682	69⅝	70½	69½	70⅜
3.18	2.54	..	..	Do. Rts.	57075	2.86	2.91	2.82	2.90
10	10	.60	6.0	Royal Oak Dairy A	nil	..	B10	A10⅜	10
12	9¾	.60	6.0	Russell Indust.	1562	10¼	10	10	10
				S					
13⅞	11	..	..	St. Law. Cem. A	1045	11¼	11¼	11	11¼
18½	15⅛	1.00	5.4	St. Law. Corp.	11670	18⅛	18½	18	18⅜
95	89	5.00	5.3	Do. 5% Pf. A	200	92	95	93	94¾
.98	.75	..	..	St. Maurice Gas	6350	.77	.90	.75	.85
11	8½	.24	2.4	Salada Shir. Hor.	8015	9¾	10	9½	10
6.50	4.00	..	..	Do. Warr.	675	4.95	5.70	4.65	5.25
12¼	11¼	.60	5.4	Sangamo	nil	..	B11¼	A12	11¼
10	10	.80	8.0	Scarfe & Co. A	100	10	10	10	10
..	..	..	..	Do. (B)	nil	..	..	..	7½
11½	11½	1.00	7.5	Scythes & Co.	nil	..	B11½	A13	†13¼
23¼	22	1.25	5.6	Do. Pref.	nil	..	B22	A23	22½
5.87½	4.05	..	..	Selkirk Hld. A	1120	4.30	4.50	4.25	4.25
30⅞	25	.80	3.0	Shawinigan	7885	28⅛	29⅛	26¾	27
31⅞	26	1.33⅓	4.7	Do. A Com.	127	28¾	29	28¼	28¼
40	37½	2.00	5.1	Do. 4% Pref. A	935	38⅞	39½	39	39½
43	42	2.25	5.4	Do. 4½ Pref. B	3	†43½	†41¾	†41¾	†41¾
†17⅝	†17⅞	▲.60+‡■	..	Sheraton	nil	..	..	..	†17⅝
45	40	1.80+*.25	..	Sher. Wms.	75	41	40	40	40
126	118	7.00	5.9	Do. Pref.	nil	..	B118½	A130	118
10	7	*.10+■	..	Shop & Sav '57	1000	7	7	7	7
8¾	6½	.20	2.9	Sicard Inc.	10	6¾	7	7	7
23½	23	1.20	5.2	Sicks Brew.	nil	..	B23½	A24½	23
35	28¾	.90	2.6	Sidney Roofing A	370	35	35	35	35
†20⅛	†20	1.00	5.0	Silknit	nil	..	B19½	A25	†20
†36	†36	2.00	5.6	Do. Pref.	nil	..	B35	A37	†36
10¾	9⅞	.60	5.9	Silverwood A	675	10⅝	10⅛	10¼	10¼
10⅝	10⅝	.60	5.9	Do. (B)	10	†10¼	†10¼	†10¼	†10¼
86	86	5.00	5.9	Simon & Sons Pf.	nil	..	..	85	†85
33¾	27	*.35	..	Simpson	2851	30¼	30⅜	29	29¾
2.95	2.00	..	..	S.K.D. Mfg.	9030	2.95	2.95	2.70	2.95
30	25	1.20+*.25	..	Slater, N.	nil	..	B25¼	A26½	25⅝
†40	†40	2.12	5.3	Do. Pref.	nil	..	B38½	A42	†40
13	9¾	.40	3.6	Sobeys Stores A	250	10½	11	10½	11
2.10	1.60	..	..	Soca	100	1.70	1.70	1.70	1.70
24¼	16½	..	..	Sogemines Pf.	150	19	19⅝	19⅝	19⅝
49	46⅝	2.80	5.8	Somerville Pfd.	nil	..	B50	A50	48½
21½	20¼	*††.20	..	Southam	1864	21¼	21¼	21¼	21¼
58	57½	2.50	4.2	So. Can. Pr.	205	57½	†60	58	†60
120	112	6.00+‡▲▲1.00	..	Do. Pref.	30	116¼	116	116	116
192	192	2.50	1.3	Sov. Life 25% Pd.	nil	..	..	A190	192
..	..	..	..	Do. 100% Pd.	nil	..	..	..	225
3.35	1.25	..	..	Spartan Air	725	1.45	1.50	1.30	1.30
.60	.35	..	..	Do. Warr.	nil	..	B.42	A.45	.35
4.50	4.05	*.10	..	Stafford Foods	2605	4.30	4.25	4.05	4.25
39½	37¼	*▲.77½	..	Stand. Brands	nil	..	B41¾	A42	39½
19	14½	.80	5.3	St. Pav	560	15	15	15	15
15	11	.60	5.2	Stand. Radio	nil	..	B11½	A12	11½
17	12⅜	.60	4.8	Stan. St. Stl.	585	13	13½	12⅜	12⅜
3.80	2.20	..	..	Stan. Wire & C.	3300	2.25	2.50	2.25	2.25
9	8⅞	.60	6.8	Stan. Brock A	nil	..	B8⅝	A8⅞	8⅞
..	..	.40	4.8	Do. (B)	nil	..	B8½	A9	8¼
38¼	32	1.20	3.4	Stedman Bros.	250	35	35	35	35
87¾	70	2.40+*.30	..	Steel of Can.	7523	75¼	75⅝	74⅛	74¼
100½	94	5.25	5.5	Steinberg's 5¼%pf.	20	95	95	95	95
24	17½	.40	2.0	Do. (A)	1905	18½	20⅜	18⅝	20
55	46	2.00+*.20	..	Sterling Trust	nil	..	B52½	A57	55
8¼	6	..	..	Stovel Press Pref.	nil	..	B10¾	A11	8¼
19	17⅜	1.00+‡.25	..	Stuart, D. A.	19	19	19	19	19
12⅛	10	.60	5.7	Sun Publishing A	400	10½	10½	10½	10½
11¾	10½	.10+■	..	Do. (B)	285	†10	10½	†10⅛	†10⅛
16⅜	13	.40+‡.10	..	Sup. Propane	450	14	14	13¾	14
22½	21	1.40	6.3	Do. Pfd.	100	22¼	22¼	22	22¼
4.50	2.05	..	..	Do. Warr.	50	3.00	2.75	2.75	2.75
17⅞	13⅞	.50	3.5	Sup. Pete Ord.	545	14½	14¾	14⅜	14⅜
4.50	3.30	.05	1.3	Do Com.	700	3.80	3.80	3.80	3.80
93	90	5.00	5.4	Do. Pref.	nil	..	B91¾	..	92
3.60	2.70	.28	10.0	Switson Ltd.	800	2.80	2.70	2.70	2.70
				T, U					
25½	21½	*.55+.45	..	Tamblyn	30	23	24	24	24
40	38	2.00	5.0	Do. 4% Pref.	40	40	40	40	40
8.00	3.30	..	..	Tancord	nil	..	B5	A5⅞	†3.25
8.62½	8.30	.50	5.9	Taylor Pearson Pf.	100	8.30	8.50	8.50	8.50
59¼	45	1.60	3.2	Texaco Can.	865	48	50	46¾	49½
80	76	4.00	4.8	Do. Pref.	125	78½	†84	80	†84
1.52	1.06	..	..	Tex Star	nil	..	B1.10	..	1.10
6⅜	5¾	*15	..	Third Cdn. G.I.	nil	..	B6⅛	A6¼	6⅛
3.25	2.75	*.07	..	Thompson, P. B.	nil	..	B2.75	A3.50	2.75
10¾	6½	..	..	Thorncliffe	500	7¾	7½	7⅜	7½
†6½	†4	.50	12.1	Tip Top Can. A	nil	..	B5	A6¾	†4
17	15½	..	..	Tip Top Tailors	nil	..	B14	A14½	15½
.35	.35	..	..	Tooke Bros.	nil	..	..	A.35	.35
..	..	..	..	Do. Pfd.	nil	..	..	..	.45
56	48½	1.90+‡.10	..	Tor. Dom. Bank	1476	52¾	53¾	52¼	53¾
13	9	.40+‡.10	..	Tor. Elevators	240	10⅝	10¾	10¾	10¾
44¾	39	1.60+‡.10	..	Tor. Gen. Tr.	110	39	39⅞	39	39⅞
18	14	§.75§§	..	Toronto Iron	250	†14	14	14	14
17½	13¾	§.75§§	..	Do. (A)	45	14	14½	14½	14½
†3.00	†3.00	..	..	Tor. Mtge.	nil	..	B3.50	..	†3.00
59	57	3.00+‡▲▲1.00	..	Tor. Star Pref.	250	58	59	59	59
32	31	1.60+*40	..	Traders Bldg.	nil	..	B32	..	32
37½	32¼	2.40	6.5	Traders Fin. A	3222	36	37	36	36¾
37	34⅜	2.40	6.6	Do. (B)	155	36⅛	36¼	36	36¼
82	77	4.50	5.9	Do. 4½% Pref.	nil	..	B78⅞	A84⅞	79
38	32	2.00	5.5	Do. 5% Pf.	40	36⅛	36½	35½	36½
†18	†12	1.00	5.6	Do. A Rights	nil	..	B14	..	†18
..	..	1.00	6.7	Do. B Rights	nil	..	B15	..	..
3.00	1.05	..	..	Do. Warr. 1956	20	1.40	1.15	1.10	1.10
5.00	2.30	..	..	Do. Warr. 1957	30	3.50	3.50	3.50	3.50
..	..	..	..	Transair A	nil	..	B1.85	A3.09	†2.00
.30	.20	..	..	Do. (B)	nil	..	B.25	A.30	.25
33½	29	1.00	3.3	Trans-Can. C.F.	250	29	30	30	30
6⅛	5½	..	..	Tr. Can. Freezers	200	5½	6	6	6
26	16½	..	..	Trans-Can. Pipe	18559	17¾	19	17¾	18¾
12⅛	8¼	§††.15	..	Trans-Mt. Oil	10265	8⅝	9½	8½	9½
17½	11½	*♦♦.15	..	Trans-Prairie	500	12¾	13	12⅞	12⅞
5½	4	..	..	Twin City Gas	210	4.40	4.50	4.00	4.00
9½	7	.30+*.10	..	Union Accept.	525	8¼	8	8	8
48½	45	3.12½	6.5	Do. 1st Pref.	35	48	48	48	48
9¾	8	.60	6.7	Do. 2nd Pref.	520	9	9	9	9
16¾	12¼	.40	3.0	Union Gas	9225	13½	13⅝	13¼	13½
53	49¾	2.75	5.2	Do. 5½% Pref.	240	51	53	52¾	52¾
12	12	.50+‡.15	..	Un. Amuse A	nil	..	B12	A13	12
12	12	.50+‡.15	..	Do. (B)	nil	..	..	A13	12
12	12	..	..	Do. A V.T.	100	12	12	12	12
15	13⅝	*.30	..	United Cdn. Shs.	286	14	14¼	14¼	14¼
25½	25	1.50	5.9	United Corp. A	nil	..	B26½	A27	25⅝
21⅜	13½	.67	[illegible]	Do. (B)	42	19¼	20	19½	19½
25	22½	1.50	6.0	Do. 5% Pfd	115	24½	25	24½	25
54½	49⅞	3.00	5.6	United Fuel A Pf.	60	54	54	53	53⅞
46	35½	1.00	2.9	Do. B Pref.	105	35⅝	36	†35	†35
15⅝	15½	1.00	6.5	United Grain A	15	15½	15½	15½	15½
18⅞	17¼	1.00+*.20	..	United Loan A	685	†18	18⅞	17¼	17¼
2.40	1.90	..	..	United Principal	8350	2.00	2.00	1.90	1.90
8¾	6½	§.40§§	..	United Steel	1375	6¾	7	7	7
14⅛	12½	▲.30	..	Universal	nil	..	..	..	14½

Dividends Declared

	This payment $	Date payable	*Date of record
Abitibi Pr. & Pap.	.42½	Jul. 1	Jun. 1
Do 4½% pf	.28⅛	Jul. 1	Jun. 1
Acadia At. Sug.	.15	Jul. 4	Jun. 10
Do A	.30	Jul. 4	Jun. 10
Algoma Steel	.30	Jun. 30	May 27
Am. Gr. Fd.	.04	Jun. 30	Jun. 20
Algonquin Bldg. Cred	.15	Jun. 28	Jun. 20
Anglo-Huronian	.25	Jul. 20	Jun. 22
Anglo-Cdn. Tel. A	.30	Sep. 1	Aug. 10
Do $2.90 pf	.73	Aug. 1	Jul. 8
Do 4½% pf	.56¼	Aug. 1	Jul. 8
Anglo-Nfld. Dev.	.07½	Jul. 1	Jun. 3
Argus Corp.	.25	Sep. 1	Jul. 20
Do $2.50 pf	.62½	Aug. 1	Jul. 20
Aro Equip.	†.25	Jul. 15	Jul. 1
Asbestos Corp.	.30	Jun. 30	Jun. 9
J. H Ashdown Hdwre A	.15	Jul. 1	Jun. 10
Do B	.18	Jul. 1	Jun. 10
Ash Temple 6% pf A	1.50	Jul. 1	Jun. 17
Do 6½% pf B	.16¼	Jul. 1	Jun. 17
Assoc. T. & T. A pf	†1.00	Jul. 1	Jun. 1
At. Wholesalers A & B	.25	Jul. 2	Jun. 18
Avalon Tel.	.10	Jun. 30	Jun. 1
Do 5% pf	.31¼	Jun. 30	Jun. 1
Do 5½% pf	.34	Jun. 30	Jun. 1
Do 6% pf	.37½	Jun. 30	Jun. 1
Do 7% pf	.43¾	Jun. 30	Jun. 1
Bank of N. S.	.55	Aug. 1	Jun. 30
Barber-Ellis 7% pf	1.75	Jul. 15	Jun. 30
Beaver Lumb.	.25+‡.25	Jul. 2	Jun. 10
Do A	.25	Jul. 2	Jun. 10
Do pf	.35	Jul. 2	Jun. 10
Beld.-Cort.	.15	Aug. 1	Jun. 30
Do 7% pf	.17½	Aug. 1	Jun. 30
Belgium Sts. pf	.25	Jul. 1	Jun. 10
Bell Tel.	.55	Jul. 15	Jun. 15
Biltmore Hats	.10	Jul. 15	Jun. 15
Do A	.25	Jul. 15	Jun. 15
Bird Construct.	.60	Jun. 30	Mar. 15
Do	.60	Sep. 30	Sep. 15
Do	.60	Dec. 31	Dec. 15
Blais Tel. Inc.	.25	Jun. 15	May 31
Bowater Corp. 5% pf	.62½	Jul. 1	Jun. 3
Do 5½% pf	.68¾	Jul. 1	Jun. 3
Bowater Mersey Pap pf	.68¾	Jul. 1	May 27
Bralorne-Pioneer M.	.10	Jul. 29	Jul. 8
Brazilian Tr. 6% pf	1.50	Jul. 2	Jun. 15
T. G. Bright	.25	Jun. 30	Jun. 17
Do 5% pf	.28¾	Jun. 30	Jun. 17
Br Am Oil	.25	Jul. 2	Jun. 3
B.C. Elec. 4% pf	1.00	Jul. 1	Jun. 6
Do 4¼% pf	.53	Jul. 1	Jun. 6
Do 4½% pf	.56	Jul. 1	Jun. 6
Do 4¾% pf	1.19	Jul. 1	Jun. 6
Do 5% pf	.63	Jul. 1	Jun. 6
Do 5% pf '56 ser.	.63	Jul. 1	Jun. 6
Do 5½% pf	.69	Jul. 1	Jun. 6
B. C. Power	.35	Jul. 15	Jun. 24
B. C. Tel.	.55	Jul. 1	Jun. 10
Br. Mtge. & Tr.	4.00	Jul. 4	Jun. 17
Do	‡1.00	Oct. 5	Sep. 16
Brooke Bond pf	.26	Jul. 15	Jun. 15
Building Prod.	.45	Jul. 2	Jun. 17
Burlington Steel	.15	Jul. 4	Jun. 10
Burns & Co.	.20	Jul. 29	Jul. 8
Do	.20	Oct. 29	Oct. 7
Butterfly Hose pf	3.50	Jul. 30	Jun. 30
Calgary Pwr.	.10	Jul. 15	Jun. 15
Do 5% pf	1.25	Jul. 2	Jun. 3
Campbell R.L.M.	.08¾	Jul. 27	Jun. 28
Canada Cement pf	.32½	Jun. 20	May 20
Can. Flooring B	.25	Jun. 30	Jun. 16
Can. Foils	.15	Aug. 15	Jul. 29
Do A pf	.15	Aug. 15	Jul. 29
Can. Iron Fdries.	.25	Jul. 4	Jun. 14
Do 4¼% pf	1.06¼	Jul. 15	Jun. 14
Can. Perm. Mtge.	.50	Jul. 2	Jun. 15
Can. Safeway pf	1.10	Jun. 30	Jun. 1
Can Steamship pf	.31¼	Jul. 4	Jun. 1
Canadian Arena	2.00	Jun. 30	Jun. 9
Cdn. Bk. of Com.	.45	Aug. 1	Jun. 30
Cdn. Brew.	.40	Jul 2	May 31
Cdn. Bronze	.37½	Aug. 1	Jul. 11
Do 5% pf	1.25	Aug. 1	Jul. 11
Cdn. Canners A	.18¾	Jul. 2	Jun. 1
Cdn. Celanese	.25	Jun. 30	May 27
Do $1.75 pf	.43¾	Jun. 30	May 27
Do $1.00 pf	.25	Jun. 30	May 27
Cdn. Drawn Steel	.25	Jul. 15	Jun. 30
Do 60c pf	.15	Jul. 15	Jun. 30
Cdn. Gen Elec.	2.00	Jul. 4	Jun. 15
Cdn. Husky Oil pf	.75	Jul. 1	Jun. 15
Cdn. Hydrocarbon	.10	Sep. 30	Sep. 8
Cdn. Ice Mach. A	.20	Jul 2	Jun. 18
Cdn. Industries	.10	Jul. 29	Jun. 30
Do 7½% pf	.93¾	Jul. 15	Jun. 15
Cdn. Ing.-Rand	.25	Jun 23	Jun. 9
Cdn. Int. Pwr. 6% pf	.75	Jun. 30	Jun. 15
Cdn. Oil Cos. 4% pf	1.00	Jul. 2	Jun. 2
Do 5% pf	1.25	Jul. 2	Jun. 2
Do 8% pf	2.00	Jul. 2	Jun. 2
Cdn. Vickers	.15	Jul. 15	Jun. 30
Cassiar Asb. Corp	.10+.05	Jul. 22	Jun. 30
Chartered Trust	.50	Jul. 2	Jun. 15
Commercial Accept.	.04	Jun. 30	Unstated
Commonwealth Int Corp.	.08	Jul. 15	Jun. 15
Confed. Life Ass.	.50	Sep. 15	Sep. 1
Do	.50	Dec 15	Dec. 1
Cons. Min. & Smelt.	.40+‡.10	Jul. 15	Jun. 17
Cons Paper Corp.	.40	Jul. 15	Jun. 3
Cons Theat. A	.13	Sep. 1	Aug. 8
Do A	.12	Dec. 1	Nov. 8
Consumers Gas	.25	Jul. 2	Jun. 15
Do 5½% pf ser. A	1.37½	Jul. 2	Jun. 15
Do 5½% pf ser. B	1.37½	Jul. 2	Jun. 15
Cont. Can. $3.75 pf	†.93¾	Jul. 1	Jun. 15
Continental Life	1.30	Aug. 1	Jul. 22
Conwest Explor.	.06	Aug. 1	Jun. 30
Corp. Inv. A & B	.08	Jun. 21	May 20
R. L. Crain	.10	Jun. 30	Jun. 10
Do	.10	Sep. 30	Sep. 9
Crown Trust	.25	Jul. 4	Jun. 21
Crown Zell. (Can.) A	.25	Jul. 1	Jun. 10
Crown Zell. Corp.	†.45	Jul. 1	Jun. 10
Crush Int.	.05	Jul. 15	Jul. 4
Do pf	1.62½	Aug. 1	Jul. 13
Dalex Co. 7% pf	1.75	Jun. 30	Jun. 15
David & Frere A	.75	Jun. 30	Jun. 15
Detroit & Can. Tunnel	†.25	Jul. 30	Jul. 20
Dome Mines	.17½	Jul. 29	Jun. 30
Dom. Comp. Fd.	.08	Jun. 30	Jun. 15
Dom. Corset	.25	Jul. 1	Jun. 17
Dom. Dairies	.10	Jul. 15	Jun. 30
Do 5% pf	.44	Jul. 15	Jun. 30
Do 5% pf	.44	Oct. 15	Sep. 30
Do 5% pf	.43	Jan. 14	Dec. 31
Do 5% pf	.44	Apr. 15	Mar. 31
Dom Div. Fd.	.08	Jun. 30	Jun. 15
Dom. Fabrics	.15	Aug. 1	Jul. 15
Do pf	.37½	Aug. 1	Jul. 15
Dom. Fdries.	.35	Jul. 2	Jun. 10
Do 4½% pf	1.12½	Jul. 15	Jun. 24
Dom. Glass	.55	Jul. 15	Jun. 27
Do pf	.17½	Jul. 15	Jun. 27
Dom. Insurance	4.00	Jul. 2	Jun. 20
Dom. Life	.50	Jun. 30	Jun. 24
Do	.50	Sep. 30	Sep. 26
Do	.50	Dec. 31	Dec 26
Dom Scot Inv. com.	.40	Jun. 30	Jun. 10
Dom. Steel & Coal Corp.	.10	Aug. 1	Jul. 8
Dom. Tar & Chem. com	.15	Aug. 1	Jul. 2
Do pf	.25	Jul 2	Jun. 1
Dover Ind.	.15	Sep. 1	Aug. 12
Do 6% pf	.15	Jul. 1	Jun. 11
Do 6% pf	.15	Oct. 1	Sep. 12
Dow Brew.	.37½	Jul. 2	Jun. 13
East Can. Sav. & Loan	.25	Jul. 2	Jun. 20
Economic Inv. Tr.	.30	Jun. 30	Jun. 16
Eddy Match	.37½	Jun. 30	Jun. 11
Do 6% pf	1.50	Jun. 30	Jun. 11
Emco Ltd.	.12½	Jul. 22	Jun. 22
Erie Flooring A	.30	Jun. 30	Jun. 15
Essex Packers pf	.62½	Jul. 2	Jun. 10
Fanny Farmer	†.25	Jun. 30	Jun. 15
Fashion Craft pf	1.25	Jul 2	Jun. 20
Fittings Ltd. A	.30	Jul. 1	Jun. 7
Foundation Co.	.12½	Jul. 15	Jun. 23
Fraser Cos.	.30	Jul. 25	Jun. 30
Gen. Electric	†.50	Jul. 25	Jun. 17
Gen. Prod. A & B	▲▲stk. div.	Jul. 14	Jun. 30
Gatineau Pwr.	.40	Jul. 1	Jun. 1
Do 5% pf	1.25	Jul. 1	Jun. 1
Do 5½% pf	1.38	Jul. 1	Jun. 1
Giant Yell. G.M.	.10+‡.05	Jun. 27	May 27
Goderich Elev.	.50+‡.25	Jul. 1	Jun. 15
Goodyear Tire	1.00	Jun. 30	Jun. 10
Do pf	.50	Jul. 30	Jul. 8
Grafton & Co. A	.25	Sep. 15	Aug. 25
Do	.25	Dec. 15	Nov 25
Grand & Toy	.45	Jun. 30	Jun. 17
Gt. Lakes Pap.	.40	Jun. 30	Jun. 16
Gt. Lakes Pwr. pf	.31¼	Jun. 30	Jun. 1
B. Greening Wire	.05	Jul. 2	Jun. 15
Greyhound Lines	.18¾	Jun. 30	Jun. 1
Gunnar Mines	.50	Oct. 1	Sep. 2
Hahn Brass	.15	Jul. 1	Jun. 9
Do 5% pf	.22½	Jul. 1	Jun. 9
Halton & Peel Tr. & Savs.	.10+‡.05	Jul. 15	Jun. 30
Ham. Cotton 5% pf	1.25	Aug. 15	Aug. 5
Hardee Farms pf	1.63	Jul. 1	Jun. 10
Harding Carp.	.15	Jul. 1	Jun. 15
Hendershot Pap. Prod.	▲3.00	Jul. 4	Jun. 15
Highland-Bell	.10	Jun. 30	Jun. 8
Hinde & Dauch	.45	Jun. 24	May 31
Do	.45	Sep. 23	Aug. 31
Hollinger Cons.	.06+‡.06	Jun. 30	Jun. 3
Home Oil A	.12½	Jul. 1	Jun. 10
F W Horner A	.12½	July 2	Jun 1
Do B	.12½	Jul. 2	Jun. 1
How. Smith Paper	.30	Jul. 29	Jun. 30
Do pf	.50	Jul. 29	Jun. 30
Howe Snd	†2% stk. div	Jun 20	Jun. 3
Hubbard Felt	.25	Jul. 1	Jun. 10
Do A	.75	Jul. 1	Jun. 10
Hudson Bay M. & S.	.75	Sep. 12	Aug. 12
Hughes-Owens A	.20	Jul. 15	Jun. 15
Do 6.4% pf	.40	Jul. 15	Jun. 15
Huron & Erie Mtge.	.47½	Jul. 1	Jun. 15
Imp Bank	.45	Aug. 1	Jun. 30
Imp. Invest. A & B	.12½	Jun. 30	Jun. 15
Do 6¼% pf	.31¼	Jul. 31	Jul. 15
Do $2 50 pf	.62½	Jun. 30	Jun. 15
Do $1.40 pf	.35	Jun. 30	Jun. 15
Imperial Life Ass	.60	Jul 1	Jun. 17
Imperial Oil	.30	Jun. 30	Jun. 7
Imp Tobacco	.12½	Jun. 30	Jun. 1
Indust Accept.	.45	Jun. 30	Jun. 3
Do 4½% pf $100 par	1.12½	Jun. 30	Jun. 3
Do 4½% pf $50 par	.56¼	Jun. 30	Jun. 3
Do 5½% pf	.68¾	Jun. 30	Jun. 3

Mining Stocks

WEEK ENDED JUNE 10, 1960

Range 1960 High	Low	Company & Dividend ($)	♦Sales	Last June 3	Week Ending June 10 High	Low	Close or latest
.40	.23	Abacus	16348	.27	.27	.23	.25
.11½	.06	Acadia Ur. .	14020	.07	.07	.07	.07
.06½	.04	Ad Astra ...	nil	...	B.04	A.05	.04
3.65	2.60	Advocate	7750	3.45	3.50	3.45	3.45
.15	.11	Agassiz	nil	...	....	A.15	.15
.78	.60	Agnico *.06 .	12083	.68	.73	.69	.73
.44	.34	Akaitcho ...	2500	.38	.40	.38	.38
.07½	.04	Alba	4000	.04	.05	.04	.04
13.25	9.20	Algom §▲▲2.50	1180	10.50	10.62½	10.25	10.50
.20	.10	Alscope	4400	.10	.10	.10	.10
.26	.16½	Amal. Lard. .	4650	.20	.22	.20	.20
.10	.06½	Amal. R.M. .	nil	...	B.07	....	.07
.04	.03	Amer'm.	3600	.03	.03	.03	.03
.65	.42	Am. Neph. .04	7500	.50	.50	.42	.42
.90	.47	Anacon	2500	.50	.50	.47½	.50
13.12½	7.25	Anglo-Hur. .50	375	7.50	7.50	7.25	7.25
.27	.14	Anglo-Rou. .	5500	.16	.15	.14	.15
.33	.08½	Ansil	5500	.09	.09½	.08½	.08½
.08½	.04½	Anthonian ..	nil	...	B.04½	A.07	.04½
.07	.03½	Arcadia warr.	400	.04	.04	.04	.04
1.02	.70	Area	2200	.73	.73	.70	.70
.10	.06	Arjon	4000	.06½	.07	.06½	.07
.08	.04	Arno	5500	.04½	.04½	.04½	.04½
.60	.33	Assoc. A'cadia	15400	.39	.39	.36	.37½
1.30	1.10	At. Coast Cop.	9400	1.20	1.20	1.10	1.10
.12	.04	Atlas Sulp. .	1100	†.02½	.06	.04	.04
.08½	.05	Atlas Y'fe .	nil	...	B.05	A.07	.06
.13½	.07	Atlin-Ruff. .	10000	.09	.09	.07	.09
.38	.23	Augustus ...	9513	.25½	.26½	.25	.26½
.11	.05	Aumacho ...	14000	.06	.07	.06	.06
.19	.06	Aumaque ...	25000	.07½	.07	.06	.06
2.95	2.21	Aunor .16 ..	100	2.48	2.45	2.45	2.45
		B					
.20	.11	Baker Talc .	nil	...	B.11	A.15	.11
.05	.03½	Band Ore ..	nil	...	B.03½	A.07½	.03½
.32	.19	Bankeno	1000	.24½	.22	.22	.22
.09½	.07½	Bankfield ...	5000	.07½	.08½	.07½	.08½
1.63	1.30	Barnat	21275	1.47	1.50	1.40	1.43
.05	.04	Barvallee ...	1000	.04	.04	.04	.04
.55	.41	Barymin §.03	1100	.43	.41	.41	.41
.17	.12	Base Metals.	11850	.12	.13	.12	.12
.12½	.06	Baska	11000	.07	.07	.06	.06
.43	.15	Bateman	14700	.16	.18	.15	.18
.05	.03	Beatrice	4000	.03	.03	.03	.03
.24	.10	B'tie-Duq. ..	4052	.14	.15½	.15	.15½
.45	.40	Beauce Placer	nil	...	B.35	....	.40
.18	.07	Beaver L'ge.	3500	.08	.07	.07	.07
.75	.51	Belcher	9700	.53	.54	.52	.52
.55	.25½	Bellechasse .	8500	.28	.28	.28	.28
.06½	.04	Belle-Chib. .	5000	.05½	.05	.04	.05
.40	.16	Belleterre ...	500	.16	.19	.19	.19
.92	.65	Bethle'm	16600	.70	.73	.68	.69
.19	.10½	Bevcon	11000	.11	.11½	.10½	.10½
.15½	.07	Bibis-Yuk. ..	73400	.09	.11	.09	.09
.67	.44	Bicroft	5750	.50	.53	.45	.52
.14	.07	Bidcop	8500	.09	.09½	.08	.08½
.27½	.09	Black Bay ..	1000	.09	.09	.09	.09
.07	.04	Bordulac	2000	.05	.04½	.04½	.04½
.08	.04½	Bornite	nil	...	B.04½	A.05	.04½
.65	.33	Bouzan	144600	.42	.50	.40	.48½
.08	.04½	Boymar	16567	.05½	.06	.04½	.05
5.55	4.60	Bralorne-P. .40	3320	5.20	5.20	5.05	5.20
.52	.40	Broulan	4100	.43	.40	.40	.40
5.40	2.80	Brunswick ..	1000	3.15	3.35	3.15	3.35
.12½	.06½	Buffadison .	14500	.07	.07½	.07	.07
2.25	1.60	Buffalo Ank.	3600	1.77	1.85	1.73	1.80
.08	.05½	Buff. R.L ..	5485	.05½	.06½	.06½	.06½
5.00	3.90	Bulolo *.25 .	1325	4.50	4.70	4.50	4.70
.09½	.06	Bunker Hill.	2000	.06½	.06	.06	.06
.24	.11	Burnt Hill ..	5000	.14	.13	.12	.12
.10	.06¼	Burrex	nil	...	B.07½	A.14	.10
		C					
.20	.08	Cable	1500	.10½	.10½	.10½	.10½
.16	.10½	Cadamet	4375	.12	.12	.10½	.11
.05	.03½	Calumet	500	.04	.04	.04	.04
6.90	4.30	Camp. Chib..	57050	5.85	6.70	5.80	6.30
14.50	9.75	Camp. R.L. .35+*.05 ..	810	11.50	11.25	10.50	11.00
1.73	1.35	Canada Can. Tung. .	20500	1.63	1.73	1.60	1.66
		Canadian					
.08	.04½	Cdn. Ast. .	10066	.05	.05	.04½	.05
.60	.25	Cdn. Dyno .	19127	.34	.40	.34	.40
.68	.42	Cdn. Mal. .	26500	.53	.54	.48	.51
.27	.11	Cdn. N. Inca	28069	.11	.13½	.11	.13½
.43	.22	Cdn. N'west.	12410	.33	.35	.30	.31½
.06	.04	Cdn. Thor ..	nil	...	B.04	A.05½	.04
.07	.04	Canalask ...	48	†.03	†.02	†.02	†.02
.15½	.10	Canam	1000	.10½	.10	.10	.10
.16½	.11	Candore	3000	.12½	.12	.11	.12
1.47	.82	Can-Erin	21150	.87	.90	.86	.88
.60	.45	Canorama ...	28119	.49	.54	.49	.50
.05	.03	Canuba	nil	...	B.03	A.04	.03
.06	.03½	Canusa	2000	.05	.03½	.03½	.03½
.09	.06	Captain	2000	.06½	.07	.06½	.07
.11	.05	Carbec	nil	...	B.05½	A.08	.05½
1.18	.80	Cariboo	5600	.83	.88	.80	.85
.23	.09	Cartier Q. ..	4500	.09	.12	.12	.12
13.75	10.87½	Cassiar Asb. .40+*.15 .	4555	12.25	13.25	12.25	13.00
.49	.25	Cayzor	nil	...	B.28	A.33	.30
.05½	.03	Cen. Man. ..	nil	...	B.03	A.06	.03
1.40	1.01	Cen. Pat. ...	3400	1.10	1.15	1.08	1.08
.15	.09	Cen. Porc. ..	5500	.09	.12	.09½	.12
3.20	1.87	Chemalloy ..	23950	2.04	2.04	1.97	2.02
.05½	.02½	Cheskirk ...	11500	.02½	.03	.02½	.03
.09½	.04½	Chess	6000	.04½	.04½	.04½	.04½
.42	.22	Chesterville .	30457	.29	.34	.29	.31
.19	.08	Chib. Cop. ..	4200	.10	.09½	.09	.09
.55	.28	Chib. Jac. ..	17250	.32	.34	.29	.32½
.15	.09	Chib K'rand.	nil	...	B.09	A.10	.09
.80	.48	Chib. Min. ..	8450	.50	.55	.50	.55
.67	.50	Chimo	15700	.57	.62	.52	.57
.08	.04	Chipman	500	.04½	.04	.04	.04
5.10	3.00	Chromium ..	3040	4.25	4.55	4.20	4.35
.12½	.06	Cleveland ..	9500	.10	.12½	.11	.11
3.25	2.78	Cochen'r *.07	13425	2.89	3.00	2.81	2.87
.15	.12	Coin Lake ..	10000	.13	.13	.13	.13
†.36	†.30	Coleman A .	325	†.30	†.33	†.33	†.33
.36	.32	Do. B	425	†.30	†.33	†.33	†.33
.42	.21	Comb. Met. .	1030	.21	.21	.21	.21
.09	.03½	Cominga	nil	...	B.04	A.09	.05
.60	.44	Coniagas	4300	.48	.48	.46	.46
.60	.43	Coniaurum ..	1000	.59	.56	.56	.56
.26	.12½	Con-Key	nil	...	B.14	A.18	.12½
.08	.04	Cons. B'keno	2000	.04½	.04½	.04½	.04½
.10½	.05½	C. Beta	5000	.06	.05½	.05½	.05½
.08	.05	C. Bi-Ore	nil	...	B.04½	A.08	.06
.12	.06	C. Callinan .	9625	.06½	.06	.06	.06
.06½	.03	C. Cad. ..	5000	.04	.03½	.03	.03
3.85	3.10	C. Disc'y *.24	17589	3.25	3.25	3.10	3.15
.32	.15	C. Fenimore.	3500	.18	.19	.15	.16
.07	.04	C. Gillies	3000	.05	.05	.05	.05
.46	.26	C. Gold. Arr.	2000	.34	.36	.34	.34
.72	.40½	C. Hall'well .	71700	.47	.49	.44	.48
.48	.26	C. Marbenor.	39500	.39	.41	.37	.39
.75	.50	C. Marcus ...	2500	.63	.66	.65	.65
1.24	.69	C. Mogul	1880	.88	.83	.83	.83
.08	.05	C. Monpas ...	nil	...	B.05½	A.09½	.05½
.26	.14½	C. Morrison .	5200	.20	.19	.18	.19
1.73	.99	C. Mosher ...	17980	1.49	1.60	1.48	1.55
.22	.12	C. Negus	19050	.18	.19	.17½	.17½
3.45	1.50	C. New Pac..	400	2.70	2.45	2.40	2.40
.06	.03	C. Nich.	5000	.05	.05	.05	.05
.54	.30	C. Northland	15500	.30	.36	.30	.34
.12	.07	C. Pershcourt	2000	.08½	.09	.07	.07
.32	.22	C. Que. G. ..	520	.22	.25	.25	.25
.06½	.04	C. Que. Y. ..	nil	...	B.04	A.05	†.02
.10	.05	C. Red Pop. .	nil	...	B.05	A.06	.05½
.11	.06	C. Regcourt .	13000	.06½	.07	.06	.06
.08½	.04	C. San'rm ...	32000	.06	.06½	.05½	.06½
20.00	17.00	C. Smelt. .80	1895	18.25	19.50	18.12½	19.37½
.20	.17	C. Stand. M.	nil	...	....	....	†.15
.47	.28	C. Sud'ry ...	24850	.32½	.32	.30½	.32
.85	.63	C. Vauze ...	2600	.63	.75	.74	.75
.47	.24	Cont. Cons. M.	nil	...	B.21	A.35	.24
.45	.25	Cont. Potash.	50	.25	†.20	†.20	†.20
4.30	3.15	Conwest *.12.	1710	3.55	3.60	3.40	3.40
.34	.16	Copper Corp.	3600	.16	.17	.16	.16½
.14	.07	Copper Man..	6700	.08½	.09½	.08	.08½
1.80	1.08	Cop. Rand ..	10685	1.28	1.33	1.22	1.30
.40	.25	Coulee	14000	.35	.34	.32	.32½
.10½	.06½	Cournor	500	.06½	.06½	.06½	.06½
.69	.26	Cowichan ...	10500	.30	.31	.29	.30
5.00	3.40	Craigmont ..	21850	4.55	5.00	4.70	5.00
.10	.09	Crestaurum .	nil	...	B.09	A.10	.09
.13	.05	Croinor	nil	...	B.06	A.10	.07
.12	.05	Crowpat	5000	.07	.07	.07	.07
.07½	.05	Cusco	6000	.05½	.06	.05	.05
		D, E, F					
.20	.09	Daering	19925	.09	.11	.09	.10
.33	.20	D'Aragon ...	16900	.22	.23	.22½	.23
.14	.06	Decoursey B.	18450	.09½	.09	.08	.08
.29	.19	Deer Horn ..	13500	.24	.24½	.23	.24½
.14½	.07½	D'Eldona ...	3400	.07½	.08	.07½	.08
.55	.42	Delnite	5500	.50	.47	.46	.47
10.00	8.75	Denison	12205	9.05	9.30	8.90	9.15
.10	.08	Dickstone C..	nil	...	B.05	A.10	.10
.08½	.05	Dolsan	2000	.06	.06	.06	.06
21.00	17.00	Dome .70 ...	790	17.87½	17.75	17.50	17.50
.11	.05	Donalda	20500	.06	.06	.05	.06
.22	.08	Duvan	3000	.10	.10	.09	.09
.08	.05	Duvex	6000	.05	.05½	.05	.05
.10	.05	East Amph. .	11000	.05	.05½	.05½	.05½
1.78	1.40	East Mal.	30710	1.41	1.44	1.40	1.42
1.90	1.40	East Sull.	2550	1.55	1.60	1.55	1.56
1.54	.89	Elder	19500	1.05	1.05	.96	1.02
.25	.11	Eldrich	25000	.14	.14	.11	.14
.09½	.06	El Sol	5500	.06	.06½	.06	.06
.33	.19	Eureka	nil	...	B.21½	A.22	.24
.16	.09	Fab. Met. ...	16500	.10	.12	.09	.10
33.87½	27.50	Falconbridge 1.20+*.15 .	4745	32.25	32.50	32.00	32.00
.05	.03	Fano	600	.03	.03	.03	.03
.91	.62	Faraday	6600	.68	.71	.69	.70
.13	.07	Farw't M. ...	1000	.07	.07	.07	.07
.85	.40	Fatima	45950	.48½	.49½	.45	.48
.00½	.00½	Flin Flon ...	nil	...	B.00¼	A.01	.00½
.05	.03	Fontana '45 .	nil	...	B.03	A.05	.03
.58	.50	Forty-Four ..	550	†.39	.55	†.35	.55
.09	.04	Francoeur ..	3200	.04	.04	.04	.04
.07	.03	Friday	nil	...	B.04	A.06	.05
2.10	1.40	Frobisher ...	33294	1.77	1.79	1.68	1.72
89.00	81.50	Do. 4% deb.	60	88.50	89.00	88.50	89.00
.10	.05	Fundy Bay .	5500	.05	.05½	.05	.05
		G, H					
.07	.04½	Galtwin	16750	.06½	.06	.05½	.05½
23.00	20.00	Gaspe Co. ..	45	20.00	†19.00	†19.00	†19.00
18.50	15.00	Geco	3730	17.12½	18.50	17.25	18.00
.14	.08	Genex	nil	...	B.08	A.09½	.08
1.10	.61	Geo-Scient. .	3800	.70	.70	.61	.64
.30	.15½	Giant Mas. .	23200	.22	.24	.20	.24
12.37½	9.00	Giant Y'fe .40+*.05 ...	1235	9.00	9.30	9.00	9.25
.37	.16	Glacier	7100	.16	.18	.16	.16
.08	.05	Glenn Ur. ...	nil	...	B.05	A.06	.05
.19	.14½	Goldale	7500	.14½	.17	.15	.15
.01	.00½	Gold Lake ..	1500	.00½	.00½	.00½	.00½
.70	.30	Gold. Age ..	48600	.68	.70	.62	.69
.40	.20	Goldfields ..	3000	.20	.21	.20	.20½
.30	.16	Goldray	1832	.19½	.19	.17	.17
6.50	5.80	Granby	nil	...	B5.50	.....	5.80
.17½	.09½	Grandroy ...	1000	.10	.10	.09½	.10
1.40	1.00	Granduc	6200	1.15	1.20	1.11	1.20
†.10	†.10	Grandview ..	nil	...	B.10	A.16	†.10
....	....	Great Falls .	nil	...	B.00¼	.....	.01
.09	.05½	Gui-Por. Ur..	nil	...	B.05½	A.09½	.05½
.11	.05	Gulch	20700	.06	.07	.06	.06
.07½	.04	Gulf Lead ...	3000	.05	.04½	.04½	.04½
10.87½	6.90	Gun'r G. *1.25	14863	7.05	7.90	7.10	7.75
1.00	.04	Do. warr. ..	27320	.08	.09	.04	.09
.10	.04½	Gwillim L. .	9500	.07½	.08	.05½	.06
.07	.03	Haitian	5000	.03¾	.03½	.03½	.03½
2.50	1.40	Hallnor *.07 .	nil	...	B1.75	A1.90	1.40
.18	.10	Hard Rock ..	22600	.12½	.13½	.12	.13½
.13	.06	Harr. Min. ..	2700	.06½	.06	.06	.06
.20	.15	Hasaga	nil	...	B.15	A.18	.15
.15	.05	H'd of Lakes	20000	.06	.06	.05	.06
.36	.23	Headway ...	18100	.31	.33	.30½	.30½
.08	.04	Heath	1000	.04	.04	.04	.04
1.80	1.46	High.-Bell *.10	900	1.70	1.65	1.60	1.65
29.87½	21.75	Hollinger .24+*.12 ..	4674	23.50	23.00	22.00	22.25
3.25	2.31	Howey Cons.	1700	2.45	2.46	2.40	2.40
4.00	2.90	Hoyle	2650	3.40	3.55	3.30	3.55
51.75	43.00	Hud. Bay 3.00	6265	46.50	49.50	47.00	49.00
.12	.07½	Hugh-Pam ..	1000	.09	.08	.07½	.07½
.42	.24	Hydra Ex. ..	3610	.25	.27	.27	.27
		I, J, K, L					
.50	.30	Inspiration ..	2200	.31	.32	.30	.30
.15	.09	Int. Ceramic.	nil	...	B.09½	A.12	.10
.13½	.05½	Int. Molyb'm	187700	.05½	.10½	.06	.08
55.37½	50.00	Int. Nickel *††▲.37½ ..	14875	55.37½	55.37½	53.25	53.50
1.75	.85	Irish Cop. ..	21000	.97	1.02	.95	.99
3.20	2.05	Iron Bay	11075	2.70	3.00	2.60	2.85
.62	.34	Iso M.	32700	.55	.60	.54	.55
.67	.24	Jack Waite .	50000	.30	.33	.25	.31
1.40	.87	Jacobus	20935	1.09	1.14	1.05	1.10
.28	.15	Jaye	1500	.18	.17	.17	.17
.14	.08	Jellicoe	15166	.08	.10	.09½	.10
.16	.07½	Joburke ...	9000	.09	.09	.08	.08
.29	.20	Joliet Que. ..	3500	.20	.22	.20	.20
.17	.08½	Jonsmith ...	16900	.09	.11	.08½	.10
.43	.25	R. J. Jowsey	2700	.27	.30	.26½	.30
.09½	.04	Kenville	17500	.04½	.04½	.04	.04½
22.62½	10.62½	K.-Addis'n .80	18038	11.75	11.75	10.62½	10.87½
3.80	1.55	Kilembe	3600	2.15	2.40	2.25	2.38
1.80	.20	Do. warr. C	36000	.25	.37	.27	.32
.42	.26½	Kirk. Min. ..	3870	.28	.29	.28	.29
.10½	.06½	Kirk. Town..	1000	.08	.08	.08	.08
.06½	.03	Kontiki Lead	3500	.05	.04½	.04½	.04½
.02	.00½	Koot. Base. .	nil	...	B.01	....	.02
.40	.32	Kopan Dev. .	5791	.35	.35	.34	.35
27.75	19.00	Labrador *.25	2060	19.00	20.00	19.25	19.50
.90	.62	Lake Cinch .	5600	.63	.64	.62	.64
1.01	.40	L. Dufault ..	23550	.50	.50	.40	.43
.10	.06	L. Lingman .	9500	.06½	.06	.06	.06
.20	.14	L. Osu	5000	.14½	.14½	.14	.14
4.50	3.90	L. Shore	102	3.90	†3.80	†3.80	†3.80
.33	.30	L. Wasa	13150	.31	.31	.30	.31
4.20	3.25	La Luz	100	3.50	3.50	3.50	3.50
4.75	2.95	Lamaque .20.	1350	3.00	3.10	3.05	3.10
1.00	.60	Langis Sil. .	8400	.61	.63	.60	.62
.69	.26	Latin Am. ..	316150	.63	.69	.62	.65
1.64	1.32	Leitch G. .06	10436	1.52	1.53	1.48	1.51
.09	.05	Lencourt	2000	.05½	.05½	.05	.05½
.04	.02	Lexindin	6200	.02	.02	.02	.02
.06	.03	Lingside	3000	.03	.03	.03	.03
.20	.06	Lithium	nil	...	B.05	A.05	.06
1.93	1.60	Little L.L. ..	3600	1.65	1.61	1.60	1.60
.36½	.19½	Lorado Ur. .	41700	.34½	.36	.33½	.36
.08	.01½	Do. warr. .	20350	.05	.06½	.04½	.05½
.08	.03½	Louvicourt ..	7100	.03½	.05	.03½	.03½
.19	.10	Lyndhurst ..	7700	.10	.12	.10½	.10½
.15	.06	Lynx Yk. ...	nil	...	B.07	A.07½	.07
		M					
2.92	2.55	Macassa .12 .	1460	2.60	2.60	2.55	2.60
.32	.15	MacDonald ..	7500	.17	.18	.15	.17
.08½	.04	Macfie	100500	.04½	.05	.04	.04½
1.18	1.00	Macleod	6366	1.00	1.05	1.00	1.05
3.35	2.61	Madsen R.L. 10+*.05 ..	5992	2.76	2.80	2.73	2.77
.10	.05	Magnet	500	.05	.07	.07	.07
.04	.02	Majortrans ..	2000	.02	.02	.02	.02
1.05	.75	Malartic	12020	.86	.86	.75	.80
.09	.03½	Maneast Ur. .	3700	.03½	.04½	.04½	.04½
.99	.50	Manitou-B. ..	4553	.57	.60	.50	.56
.17	.09	Maralgo	13985	.10	.09½	.09	.09
.13	.07½	Marcon	500	.08	.08	.08	.08
1.33	.77	Maritimes ...	30150	.80	.83	.80	.80
.47½	.30	Martin McN..	139200	.45	.46½	.41	.43
.32	.12	Massval	1250	.12½	.13	†.10	†.10
.10	.06	Matachewan.	3160	.06½	.06½	.06½	.06½
6.10	5.00	Mattagami ..	200	5.10	5.00	5.00	5.00
.13½	.08	Maybrun	9700	.08	.09	.08½	.08½
30.50	23.75	McIntyre 1.00	3401	24.62½	25.00	24.12½	24.37½
.31	.15	McK. R.L. ..	6700	.17½	.20	.16½	.20
.08	.05	McMarmac ..	4000	.05	.05	.05	.05
.48	.33	McWatters ..	18000	.39	.41	.38½	.39
.20	.15	Mentor Exp..	nil	...	B.17	A.18	.17
1.15	.61	Merrill Is. ..	31015	.67	.72	.65	.68
.13	.07	Meta Ur. ...	4000	.07½	.07	.07	.07
.32	.15	Mid-Chib. ...	nil	...	B.18	A.19	.18
.85	.45	Midrim	7950	.59	.54	.47	.53
.17	.09	Midwest	12000	.15	.15	.14	.14
1.09	.70	Milliken L. .	7935	.88	.86	.83	.84
.07	.04½	Mindamar ..	500	.05	.05	.05	.05
12.62½	10.37½	Mng. Corp. *.25	915	10.50	10.75	10.37½	10.50
.10	.05	Min. Ore	18000	.07	.08	.06	.08
.12	.08	Mogador	3100	.09	.09	†.06	†.06
1.12	.60	Molyb'nite ..	300	.65	.60	.60	.60
.80	.61	Moneta	6900	.63	.63	.61	.63
.25	.14	Monpre	nil	...	....	A.14	†.12
.61	.50	Mt. Wt. Iron	137875	.50	.58	.50	.56
.59	.27	Multi-Min. ..	1000	.29	.28	.27½	.27½
.80	.35	Murray M. ..	512850	.62	.73	.56	.68
		N					
.20½	.09½	Nama Cr. ...	8000	.11	.11	.09½	.09½
.10	.03	Nat. Ex.	18000	.03	.04	.03	.04
.09	.04	Nealon	23000	.04½	.04	.04	.04
.15	.09	Nello Min. ..	2000	.09	.09½	.09½	.09½
.10	.07	Nesbitt L. ..	20400	.08	.08½	.07	.08
.09	.03½	N. Ainsworth	11000	.05	.04	.03½	.04
.07½	.04	N. Alger	4000	.04½	.04½	.04	.04
.35	.25	N. Athona ..	40947	.27	.32½	.28	.31
.19½	.06	New Bidl'e .	5025	.06	.07	.06	.06
.43	.26	N. Calumt §.02	10050	.38	.36	.35	.36
.07	.05¼	N. Cronin ..	500	.05¼	.05½	.05½	.05½
.16½	.09½	N. Delhi	4500	.10	.11	.09½	.10
3.10	2.20	N. Dick'n .10+*.03 ..	5800	2.72	2.72	2.65	2.70
....	....	N. Far North	nil	...	....	A.20	.74
.19	.05	N. Formaque	14700	†.04	.06	.05	.06
.09	.04	N. G'dvue ..	5000	.04½	.04½	.04	.04
.05	.03½	N. Hamil	1000	.04	.03½	.03½	.03½
.19	.07	N. Har'na ...	500	.09	.09	.09	.09
1.04	.63	N. Hosco	26800	.74	.77	.71	.75
.07½	.04	N. Imperial .	1500	.06½	.04	.04	.04
.14	.04½	N. Indian ...	6515	.07	.08	.07	.08
.06	.04	N. Jack Lk. .	1000	.04	.04	.04	.04
.09½	.05	N. Jason	17700	.05	.05½	.05	.05
.13	.07	N. Kelore	43000	.07	.09½	.07	.09½
.25	.13	Newlund	13220	.13½	.15	.13	.15
.42	.30	N. Man.	1000	.30	.30	.30	.30
1.27	.26	N. M'l'que ..	206825	.30	.48	.27	.45
.07	.04½	Newnorth ...	nil	...	B.04½	A.05	.04½
.12	.04½	N. Rouyn	3000	.04½	.06	.06	.06
.06	.02½	N. Santiago .	13500	.03	.03½	.03	.03
.06	.03	N. Senator ..	10528	.04	.03	.03	.03
.18	.12	N. Taku	nil	...	B.12½	A.18	.12
.90	.15	N.W. Amulet	45254	.15	.20	.15	.20
.72	.35	Nickel M & S	7296	.36	.38	.35	.37
.75	.40	Nickel Rim .	2500	.41	.40	.40	.40
1.46	.75	Nipissing ...	2000	.75	.79	.75	.79
.07	.04	Nisto	2600	.05	.05	.04½	.04½
.09½	.05	Nocano	nil	...	B.05½	A.07	.08
.20	.11	Nor. Acme ..	1000	.15	.14	.14	.14
48.75	36.50	Noranda 2.00	9365	38.00	38.75	36.50	36.75
1.17	.38	Norbeau	7700	.42	.41	.40	.40
.07	.03	Norgold	11500	.06	.06½	.05½	.06
.24½	.20	Norlartic	6200	.21	.20	.20	.20
3.70	2.80	Normetal *.10	4670	2.90	2.95	2.80	2.80
.13	.07½	Norpax	3200	.08	.10	.09	.09
.12	.05	Norsym'e	17230	.06	.06	.05½	.06
.08	.05½	N.A. Asb. ...	500	.05½	.05½	.05½	.05½
.91	.40	N. Am. R.M.	3200	.55	.59	.50	.50
1.30	.74	N. Coldstream	47106	1.03	1.09	.96	1.05
.59	.37	Northgate ...	5583	.40	.39	.37	.37
.38	.23	N. Goldcrest.	11266	.24	.26	.24	.25
1.25	.66	N. Rankin ...	19800	.72	.71	.66	.70
1.31	1.10	North Can. .	1100	1.15	1.20	1.12	1.12
1.41	.69	Northspan ..	6750	.84	.83	.78	.78
.81	.23	Do. warr. ..	2900	.29	.31	.28	.28
.06	.03½	N.W. Vent. .	500	.05	.04½	.04½	.04½
.15½	.09	Norvalie	3500	.09½	.09½	.09	.09
1.05	.80	N. Beaucage.	nil	...	B.35	A.85	.80
.17	.11	Nudulama ...	1000	.11	.11	.11	.11
		O, P					
.16	.10	Obalski	500	.11	.10	.10	.10
.10	.04½	Obaska	5500	.05	.05	.04½	.04½
.80	.55	O'Brien	1860	.59	.59	.57	.57
.16	.09	Oka	nil	...	B.09½	A.12½	.09½
.15½	.11	O'Leary	1000	.12	.12	.12	.12
.23	.11	Opemisca ...	2500	.12	.12	.11	.11
8.60	5.25	Opemiska ...	12415	6.05	6.25	5.90	6.10
1.37	.80	Orchan	81525	1.21	1.21	1.12	1.12
.09½	.05	Orenada	2000	.05	.05	.05	.05
.37	.25½	Ormsby	1000	.26	.26	.26	.26
.35	.26	Osisko	733	.26	.26	.26	.26
.18	.10½	PCE Explor..	nil	...	B.12	A.15	.11
.77	.50	Pac. Nickel .	2400	†.49	.53	.50	.53
.66	.57	Pamour P. §.04	1100	.57	.57	.57	.57
.14½	.06½	Paramaque ..	79500	.09	.11	.08½	.09
.23	.11	Pardee	14740	.11½	.15	.11	.15
.16	.09	Partridge ...	nil	...	B.02½	A.06	.06
4.40	3.00	Patino §▲.10.	1283	4.00	4.10	3.90	4.10
.66	.22	Do. B warr.	4600	.29	.32	.30	.31
2.85	2.40	Pato Cons. .20	4355	2.40	2.60	2.45	2.60
.55	.13	Paudash	7000	.15	.15	.13	.15
.33	.16	Paymaster §.01	1500	.16½	.16½	.16½	.16½
.39	.11	Peerless	25000	.12	.15	.12	.13
3.15	2.40	P. Oreille *▲.25	300	2.50	2.50	2.50	2.50
.55	.11	Pennbec	1000	.18½	.19	.19	.19
.21½	.13	Perron	700	.14	.14½	.14½	.14½
1.02	.67	Pickle Cr.§▲.	9357	.70	.70	.67	.68
.07	.04	Pitch Ore ...	2000	.04	.04½	.04	.04
.05	.03	Pitt G.	7000	.03	.03½	.03	.03½
12.87½	10.12½	Placer .50 ...	8740	12.50	12.87½	12.37½	12.87½
.09½	.05	Porc. Prime.	2500	.08	.06	.06	.06
.93	.35½	Portage	21000	.40	.40	.37½	.40
.42	.27	Powell R. ...	nil	...	B.28	A.30	.28
5.15	3.40	Preston §1.00	1145	3.68	3.70	3.50	3.50
3.25	2.12	Pronto *.60 .	2275	2.15	2.20	2.12	2.13
.71	.35	Prospectors .	5600	.40	.40	.35	.37
.08	.04	Purdex	1000	.04½	.05	.05	.05
		Q, R					
.22	.13	Quatsino	2600	.21	.20½	.20	.20
.23	.08	Que. Ascot .	20163	.09	.10	.08½	.09
.29	.14	Que. Chib. ..	22205	.17	.18	.14	.18
3.85	1.27	Que. Cobalt.	12725	3.25	3.50	3.25	3.45
.19	.12	Que. Cop. ...	11125	.13	.14	.12	.14
.06	.02½	Que. Lab. ...	3100	.03	.03	.02½	.02½
3.50	2.50	Que. Lith. ..	700	2.60	2.60	2.50	2.50
.13½	.09	Que. Man. ..	3000	.11	.10	.09	.09
.66	.45	Que. Met. ...	14300	.61	.65	.59	.62
.17	.10½	Que. Smelt. .	4500	.10½	.12	.10½	.10½
.01	.00¼	Do. warr. .	nil	...	....	....	.00¼
.16	.10	Queenston C.	5530	.11	.11	.10	.11
11.87½	8.65	Quemont *.40	2985	8.85	8.95	8.70	8.70
.78	.53	Radiore	37500	.53	.58	.53	.56
.38	.20	Rainville	nil	...	B.18	A.21	.20
.68	.45	Rayrock	51950	.48	.57	.47½	.53
.60	.24	Realm	47000	.35	.35	.28	.28
.00¼	.00¼	Red Cloud ..	nil	...	B.00¼	....	.00¼
.05	.02	Red Crest ...	1200	.03	.02	.02	.02
.03	.01	Red Hawk ..	nil	...	B.01	....	.01
2.10	1.50	Reeves McD. *.20	nil	...	B1.78	A2.00	1.80
1.95	1.47	Renabie §1.10.	400	1.64	1.63	1.63	1.63
.46	.25	Rexspar	34625	.32	.34½	.29	.34½
.05	.00½	Rice Lake ...	6000	.02	.02½	.02½	.02½
.08½	.04	Rio-Rup.	1000	.05	.05	.05	.05
.26	.13	Rix-A'basca ▲▲§.05 ...	13400	.16½	.18	.17	.18
.43	.20	Roberval	2000	.22	.23	.23	.23
.13	.09	Roche M. ...	11300	.10	.10	.09	.09½
.35	.15	Rockwin	13000	.16½	.19	.16	.18
.09	.06	Rowan Cons.	1000	.06	.06	.06	.06
.13	.08	Ryanor	6000	.09	.09	.08	.08½
		S					
6.50	4.75	St. Law. Riv.	18743	6.25	6.35	6.05	6.15
.99	.48	San Antonio.	84659	.72	.99	.69	.91
.13	.07	Sand River .	7300	.08	.09	.07½	.08
.24½	.15	Satellite	500	.15	.15	.15	.15

Bid and Ask quotes of Toronto and Montreal exchanges up to press time are published on page 4[illegible]

Range 1960 High	Low	Company & Dividend ($)	♦Sales	Last June 3	Week Ending June 10 High	Low	Close or latest
....	....	Scotia Gold .	nil	...	....	A.00½	.01½
1.01	.70	Sheep Cr. *.08	29100	.83	.85	.82	.82
3.25	2.55	Sherritt G *.10	24535	2.80	2.95	2.80	2.85
4.50	3.30	Sigma M. .20	200	3.40	3.35	3.35	3.35
.34	.17	Silbak Prem.	43625	.26	.33	.23	.33
.43	.27	Silver M. ...	12180	.31	.31	.30	.30
.07	.03½	Silver R.	nil	...	B.03¼	....	.03½
.32	.16½	Silver Stand.	5600	.20	.22	.19	.19
1.09	.87	Siscoe §.04½.	30425	.90	.91	.87	.87
.06	.02½	Skeena	22000	.03	.04	.03	.04
.38	.08	South-Duf. .	75000	.24	.28	.23	.26
.12	.05	Standard G..	1000	.05	.05	.05	.05
.46	.25	Stanleigh ...	101635	.38	.45	.38	.44
.13	.06	Do. warr. ..	1500	.06	.07	.06	.07
.56	.25	Stanrock	11690	.28	.28	.25	.25
.01	.00½	Star Lake ...	nil	...	B.00¼	A.01	.01
1.90	1.15	Star Land Ex.	nil	...	B1.75	A1.95	1.25
.07	.04	Starrat O. ..	11000	.04	.04	.04	.04
.06	.03	Steeloy	1000	.03½	.04½	.04½	.04½
13.25	8.60	Steep Rock .	20288	8.80	9.25	8.75	8.95
.22	.18	Sturgeon R. .	2500	.18½	.18	.18	.18
.10	.05	Sudbury G. .	2000	.07	.07	.06	.06
1.85	1.40	Sullivan	3700	1.45	1.45	1.42	1.45
.26	.12	Sunburst	30600	.21	.22½	.20	.21
.12	.11	Sunshine	nil	...	B.10	A.12	.12
1.04	.60	Sylvanite .06	28065	.78	.80	.77	.79
		T, U					
.10½	.07	Tache Lk. ..	9000	.07½	.08	.07	.07
.69	.39	Taurcanis ...	700	.48	.48	.48	.48
.57	.37	Do. v.t.	1000	.43	.45	.45	.45
.19	.13	Taylor B. ...	nil	...	B.14	....	†.12
.13	.07	Tazin	nil	...	B.07	A.08	.07
2.80	1.52	T.-Hughes .10	11335	1.61	1.65	1.52	1.61
2.15	1.25	Temagami ..	32510	1.80	2.05	1.80	2.00
.40	.20	Territory	40930	.24½	.24½	.23	.23
.98	.43	Thompson ...	23550	.78	.84	.75	.77
.07	.04	Tiara	4600	.04½	.04½	.04½	.04½
.16	.05	Tib-Explor. .	2000	.05	.06	.06	.06
.62	.41	Tombill	12750	.45	.45	.41	.43
.31	.24½	Torbrit S. ..	1500	.27	.26	.26	.26
.19½	.09½	Torwest	18000	.10½	.10½	.10	.10½
.09½	.06	Towagmac ..	nil	...	B.06½	A.07	.08
.18	.14	Trans. Res. .	nil	...	B.15	A.16¼	.14
.05	.02½	Trebor	1570	.03	.02½	†.01½	†.01½
.47	.23	Tribag	1000	.25	.25	.25	.25
.17	.08	Trinity	nil	...	B.07	A.09	.09
.12½	.06	Trojan	10000	.09½	.10	.09½	.10
.14	.08	Ultra-Shaw. .	3800	.08	.08½	.08	.08½
.24	.17	Union Min. .	nil	...	B.17	A.17½	.17½
5.20	3.45	United Asb. .	55750	4.10	4.95	4.20	4.70
6.75	5.30	Un. Keno. *.26+.04 ..	3000	6.15	6.35	6.20	6.25
.28	.18	Un. N. Fort.	10920	.18½	.20	.18½	.20
1.25	1.00	Upper Can. *.03	10600	1.01	1.03	1.00	1.00
.01½	.00¾	Utica	nil	...	B.00¾	A.01½	.01
		V, W					
.02½	.01	Van'da '48 ..	nil	...	B.01	A.02½	.02
.51	.15	Vanguard ...	88800	.45	.51	.45	.46
28.00	21.75	Ventures .50.	6835	24.00	24.00	22.50	23.00
.34½	.25½	Vespar	3000	.28	.29	.26	.27
1.60	1.38	ViolaMac ...	1925	1.42	1.42	1.40	1.40
.12	.07	Virginia	1000	.09	.07	.07	.07
6.90	6.00	Waite A. .80	2995	6.15	6.25	6.00	6.10
.10	.04	Weedon M. .	1500	.04½	.04½	.04	.04½
.04½	.03	Wendell	7100	.03	.03	.03	.03
.12	.07	Werner Lk. .	2000	.07½	.07	.07	.07
.15	.08	West Ex. ...	6000	.12	.10	.10	.10
.05½	.02	West Mal. ..	nil	...	B.03	A.04	.02
.07	.04	West Min. ..	nil	...	B.05	A.06	.04
.30	.12½	West. Surf .	2375	.15	.13½	.13½	.13½
.06	.03	Westville ...	nil	...	B.03	A.05	.04
1.64	1.10	Willroy	10350	1.24	1.24	1.16	1.19
1.05	.50	Do. warr. ..	200	.60	.60	.52	.52
.15½	.08½	Wiltsey C. .	105000	.09	.12	.08½	.10
.07	.04½	Winchester .	5500	.05	.05	.04½	.05
.14	.09	Windfall	2000	.09½	.09½	.09½	.09½
.02	.01	Wpg. R. Tin	nil	...	B.00½	A.01½	.01
1.40	1.01	Wright-Har..	2165	1.10	1.10	1.06	1.10
		Y, Z					
.27	.15	Yale Lead ..	15250	.15½	.16½	.15	.16
.09½	.05½	Yellorex	nil	...	B.05½	A.08	.06
1.12	.95	Y'ke Bear *.02½	6320	1.00	1.00	.95	.97
.87	.56	H. G. Young	28900	.63	.65	.61	.62
.05	.03	Yukeno	7000	.03½	.03½	.03	.03
.72	.57	Yukon-Cons.§■	2500	.58	.60	.57	.60
.29	.19	Zenmac	46700	.19½	.22	.19	.21
.29	.18	Zulapa	nil	...	B.17	A.20	.20

Oil Stocks

Range 1960 High	Low	Company & Dividend ($)	♦Sales	Last June 3	Week Ending June 10 High	Low	Close or latest
.21½	.15	Acme	9300	.15½	.15½	.15	.15
.06	.03	Albedena ...	1500	.03	.03	.03	.03
.60	.36	Alta. P. Cons. *.02	1010	.37	.37	†.30	.36
.08½	.02	Aldina	nil	...	B.02	A.03	.02
.36	.20	Allied Roxana	nil	...	B.22	A.25	.22
3.20	1.70	Alminex	7500	1.75	1.75	1.70	1.70
.06	.02¼	Amalta	7000	.03½	.04½	.04½	.04½
.12	.06½	Amer. Leduc	8450	.09	.09½	.06½	.07½
2.90	2.00	Amurex	nil	...	....	....	2.30
.65	.40	Anaconda ..	930	.40	.54	†.32	.40
.14½	.07	Anchor	1000	.07	.08	.07	.07
7.60	5.00	Anglo Am.*■	nil	...	B4.75	....	5.00
.89	.47½	Asamera	17700	.55	.53	.47½	.53
		B					
8.00	5.40	Bailey-Sel. A	6445	5.85	6.00	5.65	5.75
19.00	16.00	Do. 5% pf. 1.25	420	17.00	16.75	16.00	16.12½
19.50	16.50	Do. 5¾% pf. 1.43¾	740	18.50	18.75	18.50	18.50
1.25	.96	Banff	1100	1.02	1.03	1.00	1.00
.08	.02½	Bashaw	nil	...	B.02	A.03½	.02½
.06½	.03½	Bata	1000	.03½	.04	.04	.04
.34	.19¾	Blue Crown .	8900	.26	.27	.25	.25
.25	.15	Bluewater ..	nil	...	B.15	A.24	.15
.34	.15	Bonnyville ..	4300	.16½	.16	.15	.16
.75	.41	Bralsaman ..	nil	...	B.40	A.45	.41
2.65	1.90	Britalta	600	2.10	2.10	2.05	2.06
		C					
.57	.40	Calalta	4000	.42	.42	.40	.40
21.75	13.50	Calg. & Ed. .10	1375	15.87½	16.50	15.62½	16.50
3.55	3.25	Calvan	600	3.25	3.25	3.25	3.25
.63	.45	Calvert	18600	.45	.45	.45	.45
		Canada					
1.35	1.00	Can. Oil L.	1800	1.04	1.06	1.04	1.04
.39	.10	Do. warr. .	10600	.14	.16½	.13	.16
.75	.21	Can. So. Oil warr.	1900	.22	.29	.25	.27
5.25	2.95	Can. So. Pet.	600	2.95	3.10	3.00	3.10
		Canadian					
1.34	.94	Cdn. Chieft'n	16200	1.00	1.02	.97	1.00
3.65	2.20	Cdn. Dev. .	19660	2.35	2.50	2.20	2.50
2.60	1.60	Cdn. Exp. G.	19800	1.65	1.70	1.60	1.70
.03½	.02	Cdn. F'tune	nil	...	B.02	A.02½	.02½
.40	.27	Cdn. H. Cr.	nil	...	B.27	A.32	.31
1.05	.71	Cdn. H'stead	4051	.75	.74	.71	.74
8.55	5.50	Cdn. Husky	9044	5.55	5.70	5.50	5.55
4.65	2.05	Do. warr. .	2155	2.30	2.35	†2.00	2.20
12.62½	9.25	Cdn. Sup. .	2265	9.60	10.00	9.70	9.85
1.25	.85	Cdn. Wil'ston	nil	...	B.50	A.75	.85
....	....	Carleton	nil	...	B.25	....	.43
.17	.10½	Castle O. ...	nil	...	B.11	A.12	.10½
6.20	4.40	Cent. Del Rio *▲▲.10	12121	5.05	5.10	4.90	4.90
1.30	.80	Charter	500	.80	.80	.80	.80
.16	.11½	Claybar	nil	...	B.15½	A.19	.15
.60	.50	Command ...	nil	...	B.50	....	.50
.19½	.08½	Commercial .	5000	†.08	.09½	.08½	.09½
1.50	1.00	Commoil	nil	...	B1.15	....	1.15
2.65	2.10	Common P. .	nil	...	B2.23	A2.50	2.23
.45	.22	Cons. Dragon	71000	.31	.30	.27	.28
.45	.36	C. East C. ..	3300	.38	.40	.36	.36
3.20	1.90	C. Mic Mac .	5025	2.01	2.01	1.90	1.95
3.95	3.00	C. W. Pet. .	3160	3.40	3.50	3.25	3.50
3.60	2.20	Cree Oil warr.	10120	3.55	3.55	3.55	3.55
1.35	1.01	Crusade	9500	1.13	1.17	1.10	1.16
		D, E, F					
.22	.15	Dalhousie ...	4100	.15	.15	†.10	.15
1.04	.51	Dev. Palmer.	17630	.60	.62	.59	.61
9.00	6.60	Dome	2720	7.00	7.00	6.90	6.90
1.72	1.25	Dom. Lease..	6100	1.69	1.70	1.62	1.62
.02¼	.01	Dom. Min'ls.	57500	.01	.01	.01	.01
.56	.48	Dynalta	7700	.52	.53	.48	.53
1.53	1.10	Dynamic Pet.	64384	1.25	1.28	1.13	1.18
.05½	.01½	East Can. ...	6000	.05½	.03½	.03	.03
.05½	.02¾	Edoran	1000	.05	.03	.03	.03
.07	.03½	Emp. Oil	4500	.04	.05½	.04	.05½
4.70	2.91	Fargo	1400	3.10	3.05	3.00	3.00
1.90	1.15	Ft. St. John .	6600	1.35	1.35	1.30	1.35
6.25	4.40	French Pt. pf.	1400	4.60	4.95	4.65	4.65
.39	.19	Futurity	2800	.22	.22	†.18	†.18
		G, H					
.07	.04	Gaspe	nil	...	B.04	A.07	.04
.04	.02	Gateway	500	.02½	.02½	.02½	.02½
1.25	.75	Gen. Pet. Dr.	100	.76	.75	.75	.75
1.10	.75	Do. A	nil	...	B.75	A.90	†.71
.12	.08	Globe	5000	†.08	.08	.08	.08
.05	.03½	Golden Sat. .	nil	...	B.03½	A.04⅞	.04½
.05	.03½	Golden Sp. .	2000	.04½	.04¾	.04¾	.04¾
13.00	8.75	Gt. Plains ..	5750	9.35	9.50	9.25	9.30
2.05	1.50	Gridoil	nil	...	B1.05	A2.00	1.50
8.50	7.00	Hi-Tower *.40	nil	...	B7.62½	A8.25	7.25
12.75	8.05	Home A .25 .	5375	8.30	8.40	8.10	8.25
11.75	7.45	Do. B	1450	7.55	8.00	7.50	7.55
14.50	9.90	Hud. Bay O.	2882	10.50	10.75	10.12½	10.25
		I, J, K, L					
.37	.08½	Israel Cont. .	nil	...	B.19	A.25	.25
.24	.14	Jump. Pound	4500	.15	.15	.14	.14
2.09	1.18	Jupiter	37100	1.25	2.09	1.30	2.00
.03	.01	Kenare	17000	.01¼	.02	.02	.02
.34	.18	Keno	10000	.21	.21	.19	.19
2.20	1.71	Landa *.02½	7974	1.72	2.00	1.71	1.71
.06	.03½	Leamac	1000	.03½	.04	.04	.04
.09	.04	Leduc Cal. .	2000	.04½	.04½	.04	.04
.25	.25	Lloydminster	nil	...	B.20	....	.25
.18	.08½	Long Is. P. .	31500	.11½	.12	.11	.11½
.67	.47	Long Pt. Gas	22900	.59	.60	.56	.56
		M, N					
.11	.05	Marigold	7000	.06	.07½	.05½	.07½
.02	.01½	Marvel	nil	...	B.01½	A.03	.01½
1.20	.90	Mayfair	nil	...	B.88	A1.00	1.02
2.34	1.50	Medallion ...	9773	1.55	1.65	1.51	1.55
.30	.18	Melton	nil	...	....	A.19	.18
.60	.43	Merit	9000	.46	.52	.48	.48½
.14	.08¼	Merland	1000	.08¼	.09	.09	.09
.63	.36	Midcon	9600	.37	.38	.36	.38
.29	.20	Mill City	14860	.20	.20½	.20	.20
.14	.05½	Mill Creek ..	nil	...	B.10	A.12	.11
.10	.02	Mollusca	nil	...	B.02	A.05	.02
2.75	1.65	Nat. Pet.	1000	2.05	1.99	1.75	1.75
.08	.04	N. Concord .	2000	.06	.04	.04	.04
.35	.20	N. Cont.	5550	.22	.23	.22	.22
.19	.10	N. Davies ...	1000	.10	.11	.11	.11
.04½	.01½	N. Richfield.	5500	.03	.02½	.01½	.02½
.05	.02	N. Spring. ...	nil	...	B.02½	A.03½	.02⅝
.68	.39½	N. Superior .	3350	.56	.58	.56	.56
.12¼	.07	N. York	nil	...	B.06	A.08	†.05
.13	.07	Northcal	6125	.07½	.08½	.07	.08½
2.95	2.00	North Cdn. ††§1.37	800	2.03	2.10	2.00	2.08
25.00	20.00	Do. 5½% pf.	100	21.00	20.50	20.50	20.50
1.04	.35	Do. warr. ..	5340	.42	.49	.43	.45
.02½	.00½	N. Cont.	3351	.00⅝	.00½	.00½	.00½
.20	.12½	Northland ...	1000	.14	.13½	.13	.13½
.09	.03¾	Nuco	8500	.05	.04½	.03¾	.04
.09	.01½	Nu-Rid'geway	3500	.02	.02½	.02½	.02½
		O, P					
.61	.36	Okalta	2000	.37	.37	.37	.37
1.88	1.35	Oregon N.G..	nil	...	B.04½	....	1.35
12.62½	8.75	Pac. Pete. ..	8961	9.10	9.40	9.05	9.15
8.95	6.25	Do. warr. ..	820	6.80	7.10	6.30	6.85
.50	.31	Palliser	nil	...	B.31	A.47	.32
.44	.30	Pamoil	7950	.31	.31	.30	.30½
3.35	3.05	Parker Dr. *.15	400	3.25	3.25	3.10	3.10
.40	.21	Peace River .	21300	.26	.27	.21	.26
.85	.45	Permo pf. ...	9450	.50	.50	.45	.45
1.44	.74	Peruvian	nil	...	B1.00	A1.05	1.00
1.17	.60	Petrol	12000	.62	.64	.61	.63
.85	.40	Phillips	7650	.50	.50	.50	.50
.95	.53	Place Gas ...	74640	.60	.64	.53	.64
.58	.17	Ponder	111700	.49½	.58	.51	.58
2.90	1.70	Prairie	250	1.70	1.78	1.78	1.78
.21	.10	Prosper	nil	...	....	....	.12
2.75	1.95	Provo	31272	2.05	2.10	2.01	2.01
		Q, R					
.05	.02½	Que. Oil D. .	2600	.03	.02½	.02½	.02½
.09	.05	Quonto	nil	...	B.05½	A.06	.05
.11	.06	Ranchmen's O.	nil	...	B.06	A.11	†.05
1.50	1.10	Ranger	2060	1.15	1.17	1.10	1.10
.06	.03	Reef Explor..	2000	.03	.04	.03	.03
.03	.03	Renfrew	nil	...	B.03	A.03½	.03
.10	.05	Rocky Pet. .	1000	.05	.05	.05	.05
.18	.11	Royal Can. V.	16500	.12	.13	.13	.13
9.50	6.75	Royalite	3355	6.90	7.25	6.80	7.25
20.00	17.25	Do. 5¼% pf. 1.31¼	100	19.00	20.00	20.00	20.00
		S					
.79	.50	Sage	1500	.58	.57	.55	.55
1.04	.46½	Sapphire	5500	.50	.51	.50	.50
47.00	36.50	Do. 5% debs.	20	†36.00	†36.00	†36.00	†36.00
1.20	.73	Sarcee P. ...	nil	...	B.76	A.80	.80
.03	.01½	Sastex	2000	.02	.02	.02	.02
4.65	3.25	Security	2425	3.80	3.90	3.75	3.85
.05	.02	Share Oils ..	nil	...	B.02	A.04	.02
.04¾	.03	Silver City .	nil	...	B.02	A.04½	.04½
.60	.40	Siscalta	200	.40	.40	.40	.40
1.70	1.50	So. W. Pete. .	400	1.70	1.51	1.51	1.51
.23½	.08	So. Union ...	13600	.09½	.10	.08½	.08½
.19	.11	Spooner	72700	.11	.13	.11	.12½
.53	.33½	Stanwell	4078	.39	.40	.35	.39
.05	.04½	Sturgeon	nil	...	B.04⅝	A.05	.04⅝
1.81	.80	Submarine ..	4600	.90	.90	.80	.80
		T, U, V					
1.15	.51	Tidal Pet. ..	5583	.58	.56	.51	.54
.42	.15	Titan	25810	.16	.17	.15	.16
.65	.30	Tr. Can. Ex. .	nil	...	B.31½	A.38	.32
.03	.02¼	Transfield ...	nil	...	B.02½	A.04	.02½
4.10	2.25	Triad	11255	2.50	2.55	2.25	2.26
.06	.03	Tri-Zone	nil	...	....	....	.04
.18	.14	Turner V. ..	1000	†.14	.14	.14	.14
1.25	.89	Un. Canso v.t.	3910	.89	.90	.90	.90
1.89	1.15	Un. Oils	23500	1.20	1.24	1.16	1.19
.07	.03	Vandoo	1000	.03½	.03½	.03½	.03½
.72	.33	Van Tor	8400	.34	.35	.33	.34
		W, Y					
.13	.07	Wayne	3100	.07½	.08	.08	.08
.21	.13	Wespac	8067	.13	.15	.13	.15
2.15	1.05	Westates	2274	1.35	1.41	1.35	1.35
.78	.50	W'burne	17300	.50	.56	.51	.52
1.88	1.15	W. Cdn. O&G	6100	1.22	1.23	1.19	1.20
.70	.40	Do. warr. ..	2100	.45	.50	.43	.47
1.55	.82	W. Decalta .	500	.90	.93	.93	.93
3.50	3.25	W. L'holds .	100	3.50	3.35	3.35	3.35
.55	.25	W. Naco	6100	.28	.30	.28	.30
.09½	.06	W. Warner ..	nil	...	B.05	A.07½	.06
.06	.03	Y'ke Can. ..	6000	.04	.04	.03½	.04

▲U. S. funds. ▲▲Initial. †Less than board lot. ♦When shown nil the figures are bid, asked and latest sale. *Paid or declared in 1960. §Paid in 1959. ‡Extra paid in 1959, shown for record purposes only, does not necessarily apply to 1960 dividend rate or payments. •After partial assets distribution. ††Dividend action deferred. §§Paid or declared after stock split. ■Stock dividend.

Industrial Stocks

(CONTINUED FROM PAGE 44)

Range 1960 High	Low	Div. R'te $	Y'ld Jun10 %	Company	♦ Sales	Last May 3	Week end. June 10 High	Low	Close or Latest
				V, W, Y, Z					
2.55	1.55	..	..	Vanadium All. .	1100	1.65	1.75	1.65	1.65
2.25	.80	..	..	Venezuelan	200	.96	.90	.80	.80
6.25	2.50	*■■.15		Do. 6% Pfd. ..	nil	..	B1.75	A2.00	2.50
20¼	15	*.20+††■		Viau new	320	†15	15	15	15
7	6½	.50	7.1	Viceroy A	30	6½	7	6½	7
3.30	3.10	..	..	Do. (B)	nil	..	B3.15	A3.25	3.15
38½	35	1.40	3.6	Victoria & Gr. ..	240	36	38½	36	38½
15	14	1.25	8.3	Vir. Dare 5% Pf.	nil	..	B15	A15	15
2.45	1.60	..	..	Wainwright	600	1.75	1.80	1.70	1.70
38⅜	33¼	1.40+‡.35		Walker-Good ...	17333	36⅝	37	36⅝	36⅞
6.00	3.45	..	..	Watermans Pen .	4150	5.50	5.75	5.12½	5.50
6.00	4.10	§.10	..	Waterous Eqpt. .	nil	..	B4.50	A5.25	5.25
3.50	2.50	..	..	Webb & Knapp .	3200	3.00	3.00	2.80	2.90
..	..	*1.50	..	Wellington Fire .	nil	..	..	..	70
..	..	..	..	Wesley Mason Pfd.	nil	..	..	..	†1.00
17⅜	12	.80	5.1	Westeel	590	16	16	15¾	15¾
32½	32½	1.20	3.7	West. Can. Brew	97	32½	32⅛	32½	32½
8	6¼	*.15	..	West. Can. Steel	nil	..	B6¼	A6⅜	6¾
3.60	2.55	..	..	West Copper	225	2.65	2.60	2.55	2.60
1.35	.58	..	..	Do. Warr.	280	.65	.60	.58	.60
34¾	32	2.00	5.8	West Grocers A .	25	33	34¼	34¼	34¼
26	24⅞	1.40	5.6	Do. Pref.	195	25	25	†23⅝	25
130	130	7.00	6.1	West Koot. Pref.	nil	..	..	..	†115
16¼	12½	.70+‡.10		West Plywood B	380	13⅛	12¾	†12⅛	†12¼
38¼	32	.70+*.10		Westminster P. .	555	34¼	34⅛	33⅝	33⅞
35	29	.70	2.0	Weston G. A ...	995	35	35	34¼	34⅞
36¼	28½	.70	2.0	Do. (B)	2370	35	35	34	34½
87	82	4.50	5.2	Do. 4½% Pref.	20	87	86½	85½	86½
16⅛	10	..	..	Do. Warr.	1765	13¾	13⅞	13	13⅞
105	100	6.00	5.7	Do. 6% Pref. .	75	104	105	104¼	105
33	30	2.80	9.3	White Hard Pfd.	nil	..	B28	A34	30
7½	6¾	*.10	..	White Pass Yukon	500	6¾	6⅞	6⅞	6⅞
..	..	§1.50	..	Willson Stat. ...	nil	..	B42	..	43¾
†99	†99	5.00	5.1	Do. Pref.	nil	..	B99	..	†99
..	..	§■	..	Windsor Hotel ...	nil	..	..	A28	†32
590	525	..	..	Wpg. Win. Club .	nil	..	..	..	590
5.00	4.25	.30	6.7	Wood Alex	290	4.75	4.75	4.50	4.50
†93	†92⅞	5.50	5.9	Wood, G.H. 5½%pf.	nil	..	B93	A94½	†93
29	24¾	1.60	6.3	Wood J. A	215	26	25⅛	25¼	25⅛
85	82	4.50	5.4	Do. Pref.	nil	..	B83	A85	83
..	..	..	..	Woodford A	nil	..	B.50	..	.50
..	..	..	..	Do. (B)	nil	..	B.10	..	.10
37	37	*■	..	Woods Mfg.	nil	..	..	A38	37
19⅞	16⅛	.40	2.4	Woodward A	1690	16⅝	17	16½	16½
8.25	4.75	..	..	Do. Warr.	260	5.75	6.00	5.50	5.50
†8¼	†7	.60	8.6	Wool Combing ..	nil	..	B9	A9½	†7
2.75	1.00	..	..	York Knitting A	nil	..	B1.60	A2.00	1.60
.27	.15	..	..	Do. (B)	nil	..	B.17	A.50	.27
35¼	31½	*1.00	..	Zellers	100	35⅜	35¼	35¼	35¼
44	41½	2.25	5.1	Do. 4½% Pref.	500	44	44	44	44
3.00	2.50	.16	5.7	Zenith	2250	2.70	2.80	2.70	2.80

▲U. S. funds. ▲▲Participating divd. §§Dividend action deferred. ■Stock divd. ††Initial. †Less than board lot. ♦Note: When sales show nil the figures are bid, ask and latest sale. ‡Extra paid in 1959, shown for record purposes only, does not necessarily apply to 1960 dividend rate of payments. ■■On arrears. ♦Paid on arrears. ††Paid or declared after stock split. §Paid in 1959. *Paid or declared in 1960. ‡‡Includes participating dividend. ♦♦On redemption.

Dividends Declared

(CONTINUED FROM PAGE 44)

Company	This payment $	Date payable	*Date of record
Ing. Mach. & Tool A	.12½	Jul. 2	Jun. 15
Do pf	1.00	Jul. 2	Jun. 15
Ingram & Bell pf	.15	Jul. 30	Jul. 15
Int. Nickel	■■†.37½	Jun. 20	Jun. 8
Int Paints (Can.) 6% pf	.60	Jun. 27	Jun. 13
Int. Power	3.00+‡2.00	Jun. 29	Jun. 15
Inv. Bd. & Sh. Corp. pf	3.00	Jun. 30	Jun. 15
Inv. Foundation	.60	Jul. 15	Jun. 15
Do 6% pf	.75	Jul. 15	Jun. 15
Jam. Pub. Ser. Ltd.	.22½	Jul. 2	May 31
Jam. Pub. Serv. Co. pf	1.75	Jul. 2	May 31
Jenkins Bros.	.50	Jul. 2	Jun. 17
Jockey Club 5½% pf	.13¾	Jul. 15	Jun. 30
Do 6% pf	.15	Jul. 15	Jun. 30
Kerr-Addison G.M.	.20	Jun. 23	May 31
Labrador M.	.25	Jun. 28	Jun. 10
Alf. Lambert Inc. A	.20	Jun. 30	Jun. 16
Do	.20	Sep. 30	Sep. 16
Do	.20	Dec. 30	Dec. 16
Do B	.20	Jun. 30	Jun. 16
Do B	.20	Sep. 30	Sep. 16
Do B	.20	Dec. 30	Dec. 16
Lambton Loan	.60	Jul. 2	Jun. 15
Landa Oil	.02½	Jul. 1	Jun. 15
Laurentide Accept. A	.15	Jul. 29	Jun. 15
Do	.15	Oct. 31	Oct. 14
Do 5% pf	.25	Jul. 29	Jul. 15
Do B	.15	Jul. 29	Jul. 15
Do $1.20 pf	.30	Jul. 29	Jul. 15
Lob. G. 1st pf ser. B	.40	Jul. 15	Jun. 15
W. M. Lowney	.25	July. 15	Jun. 15
MacLaren Pwr. & Pap.	.50+‡.25	Jun. 30	Jun. 3
Madsen R.L.G.M.	.05+‡.05	Jun. 24	May 24
Mailman Corp. $1 cum. pf	.25	Jun. 30	Jun. 16
Do 5% pf	1.25	Jul. 31	Jul. 15
Manufacturers Life Ins.	1.70	Jul. 2	Jun. 6
Maple Leaf Mill. 5% pf	1.25	Jul. 1	Jun. 17
Maxwell Ltd.	.05	Jul. 1	Jun. 15
Do pf	1.50	Jul. 1	Jun. 15
Melchers Dist. pf	.30	Jun. 30	May 30
L. McBrine Co. pf	.50	Jul. 1	Jun. 10
Mindustrial Corp.	.05	Jun. 30	Jun. 10
Mining Corp.	.25	Jun. 30	Jun. 1
J. S. Mitchell	.31¼	Jul. 2	Jun. 15
Mod. Containers A	.25	Jul. 1	Jun. 20
Moirs Ltd.	2.00	Jul. 2	Jun. 15
Do 1st pf	2.50	Jul. 2	Jun. 15
Molson's Brew. A	.22½	Jun. 24	Jun. 3
Do B	.22½	Jun. 24	Jun. 3
Do 5½% pf	.55	Jun. 30	Jun. 3
Monarch Inv.	1.00	Jun. 30	Jun. 20
Monarch Knit pf	1.12½	Jul. 2	Jun. 17
Monarch Life	.40	Jul. 2	Jun. 24
Mtl. City & Dist. Sav. Bk.	.55	Jul. 4	May 31
Mtl. Locomotive	.25	Jul. 2	Jun. 20
Montreal Trust	.35	Jul. 15	Jun. 30
Moore Corp. 7% A & B pf	†1.75	Jul. 2	May 27
Do 7% pf A & B	†1.75	Oct. 1	Aug. 26
Do com.	†.20	Jul. 2	May 27
Do com.	†.20	Oct. 1	Aug. 26
Morrow Screw 4% pf	1.00	Jul. 4	Jun. 20
Mt. Royal Dairies	••stk. div.	Jul. 15	Jun. 30
Nat. Grocers	.15	Jul. 1	Jun. 10
Do pf	.37½	Jul. 1	Jun. 10
Nat. Hose A	.05	Jul. 4	Jun. 3
Do	.05	Sep. 30	Sep. 2
Do B	.04	Jul. 4	Jun. 3
Nat. Lead 6% pf	†1.50	Aug. 1	Jul. 8
Do com.	†.75	Jun. 24	Jun. 8
Nat. Life 100% pf	.20	Aug. 1	Jul. 25
Do	.20	Nov. 1	Oct. 25
Nat. Steel Car	.20	Jul. 15	Jun. 15
National Trust	.50	Jul. 4	Jun. 15
Niagara W.W.	.15	Jul. 2	Jun. 9
Do B	.15	Jul. 2	Jun. 9
Normetal M.	.05	Jun. 29	Jun. 1
North Star Oil 5% pf	.62½	Jul. 2	Jun. 3
Nor. Que Pwr.	.40	Jul. 25	Jun. 30
N. S. Lt. & Pwr.	.15	Jul. 2	Jun. 1
Ocean Cement	.07½	Jul. 4	Jun. 17
Office Spec.	.20	Jun. 30	Jun. 14
Ogilvie Flour Mills	.50	Jul. 4	Jun. 2
Ont. Beauty Supply pf	.25	Jul. 11	Jun. 30
Ont. Loan & Deb.	.25	Jul. 4	Jun. 15
Ont. Steel Prod.	.25	Aug. 15	Jul. 15
Do 7% pf	1.75	Aug. 15	Jul. 15
Page-Hersey Tubes	.22½	Jul. 2	Jun. 15
Pato Cons. Gold	.10	Jun. 30	Jun. 10
Peoples Cred. Jew pf	3.00	Jun. 30	Jun. 15
Placer Dev.	.25	Jun. 17	May 27
Power Corp.	.50	Jun. 30	Jun. 5
Do 4½% pf	.56	Jul. 15	Jun. 20
Do 6% pf	.75	Jul. 15	Jun. 20
Premier Trust	2.00	Jul. 1	Jun. 17
Price Bros. 4% pf	2.00	Jul. 1	May 27
Do com.	.50	Aug. 1	Jun. 30
Provincial Bk.	.30	Aug. 1	Jul. 15
Provincial Trans.	.25	Jun. 30	Jun. 10
Do 5% pf	.63	Jul. 1	Jun. 10
Que. Tel. 5½% pf	.27½	Jul. 1	Jun. 17
Do 5% pf	.25	Jul. 1	Jun. 17
Quemont M.	.20	Jun. 29	Jun. 1
R & M Bearings A	.28	Jul. 2	Jun. 15
Rapid Grip & Bat.	.15	July. 1	Jun. 14
Do pf	1.50	Jul. 1	Jun. 14
Reeves Macdonald M.	.20	Jun. 27	May 28
Reitman's (Can.)	.10+‡.05	Aug. 1	Jul. 15
Do A	.10+‡.05	Aug. 1	Jul. 15
Renolds Chains A	.28+‡.05	Jul. 1	Jun. 15
Do	.27+‡.05	Oct. 1	Sep. 15
P. L. Robertson	.20	Jul. 1	Jun. 20
Do 6% 1st pf	.30	Jul. 1	Jun. 20
Do $1 pf	.25+•.15	Jul. 1	Jun. 20
Robinson Little	.20	Jun. 30	Jun. 15
A. V. Roe pf	1.43¾	Jul. 2	Jun. 17
Royalite Oil pf	.328125	Jul. 1	Jun. 10
Russell Ind.	.15	Jun. 30	Jun. 16
St. Law'r Corp.	.25	Jul. 25	Jun. 24
Do 5% pf ser. A	1.25	Jul. 25	Jun. 24
St. Lawrence Cred.	.15	Jul. 15	Jun. 30
Do	.15	Oct. 15	Sep. 30
Do	.15	Jan. 15	Dec. 31
Do A	.15	Aug. 1	Jul. 15
Do	.15	Nov. 1	Oct. 15
Sangamo Co.	.15	Jun. 29	Jun. 27
Shaw W & P 4% pf ser. A	.50	Jul. 2	Jun. 2
Do 4½% pf ser. B	.56½	Jul. 2	Jun. 2
Sheep Creek M.	.05	Aug. 15	Jul. 15
Sheraton Corp. of Am.	†.15+2% stk.	Aug. 1	Jul. 1
Sher. Wms. 7% pf	1.75	Jul. 2	Jun. 10
Shop & Save Ltd.	**stk. div.	Aug. 15	Aug. 1
Sicard Inc.	.10	Jun. 20	May 31
Sicks' Brew.	.30	Jun. 22	Jun. 3
Sigma Mines	.10	Jul. 27	Jun. 28
Silverwood Dair. A	.15	Jul. 2	May 31
Do B	.15	Jul. 2	May 31
N. Slater	.30	Aug. 2	Jul. 8
Do pf	.53	Jul. 15	Jun. 24
Sobeys Sts. A	.10	Jul. 15	Jul. 2
Do B	.10	Jul. 15	Jul. 2
Somerville Ltd. pf	.70	Jul. 1	Jun. 15
Southam Co.	♦.20	Jun. 28	Jun. 14
So. Can. Pwr.	.62½	Aug. 15	Jul. 20
Do 6% pf	1.50	Jul. 15	Jun. 20
Stafford Foods	§§.10	Jun. 30	Jun. 8
Stand. Paving	.20	Jul. 1	Jun. 15
Stand. Radio	.15	Jul. 8	Jun. 17
Stand. Struct. St.	.15	Jun. 29	Jun. 15
Stanfield's Ltd. A	.30	Jul. 15	Jun. 30
Do B	.40	Jul. 15	Jun. 30
Stedman Bros.	.30	Jul. 1	Jun. 15
Steetley of Can. pf	1.12½	Jul. 15	Jun. 30
Sterling Trusts	.50	Jul. 2	Jun. 15
Superior Prop. pf	.35	Jul. 2	Jun. 15
Supertest Pet. com.	.02½	Jul. 15	Jun. 14
Do ord.	.25	Jul. 15	Jun. 14
Do 5% pf	1.25	Jul. 15	Jun. 14
Supervised Am. Fd.	.03	Jun. 22	Jun. 15
Supervised Inc. Fd.	.04	Jun. 22	Jun. 15
Switson Ind.	.07	Jun. 30	Jun. 17
Sylvanite G.M.	.03	Jul. 4	May 9
G. Tamblyn Ltd.	.20	Jul. 2	Jun. 3
Do 4% pf	.50	Jul. 2	Jun. 3
Texaco Can. Ltd. pf	1.00	Jul. 20	Jun. 30
Tor.-Dom. Bank	.47½	Aug. 2	Jun. 30
Tor. Gen. Trusts	.40	Jul. 2	Jun. 3
Traders Fin. A & B	.60	Jul. 4	Jun. 10
Do 4½% pf	1.12½	Jul. 4	Jun. 10
Do 5% pf	.50	Jul. 4	Jun. 10
Trans Can. Corp. Fd.	.25	Jul. 1	Jun. 15
Do	.25	Oct. 1	Sep 15
Do	.25	Jan. 4	Dec. 15
Union Accept.	.07½	Jul. 1	Jun. 15
Do 2nd pf	.15	Jul. 1	Jun. 15
Union Gas	.10	Aug. 1	Jul. 8
Do 5½% pf	.69	Jun. 30	Jun. 10
Un. Fuel Invest. 6% A pf	.75	Jul. 2	Jun. 20
Un Keno Hill M.	.10	Jul 22	Jun. 30
Un. Towns Elec.	.20	Jun. 30	Jun. 1
Vandry Inc. A	.10	Jun 30	Jun. 15
Do	.10	Sep 30	Sep 15
Do	.10	Dec 31	Dec 15
Ventures Ltd.	.25	Aug. 31	Aug. 15
Viau Ltd	.20	Jul 2	Jun. 20
H. Walker-Good. & Worts	.35+‡.35	Jul. 15	Jun. 20
Waterloo Tr. & Svs.	.32½	Jul. 2	Jun. 22
W. Koot. Pwr. & Lt. pf	1.75	Jul. 2	Jun. 15
West. Grocers A	.50	Jul. 15	Jun. 15
Do 7% pf	.35	Jul. 15	Jun. 15
West. Plywood B	.17½	Jul. 15	Jun. 23
Willson Stat. pf	1.25	Jul. 15	Jun. 30
Geo. Weston A	.17½	Jul. 1	Jun. 10
Do B	.17½	Jul. 1	Jun. 10
John Wood Ind. A	.40	Jul. 2	Jun. 15
Do B	.40	Jul. 2	Jun. 15
Do 4½% pf	1.12½	Jul. 2	Jun. 15
Yell'knife Bear M.	.02½	Jun. 30	Jun. 10
Zeller's Ltd.	.35	Aug. 1	Jul. 2
Do pf	.56½	Aug. 1	Jul. 2
Zenith Elec.	.04	Jun. 30	Jun. 15

▲▲—2 shs. of 3% non cum. red. 2nd pf. shs. (25c par) for ea. cl. A or B sh. held.
§—First foll. 3-for-1 stk split
†—U.S. funds. ‡Extra
*—The ex-dividend date is usually at least two full business days prior to the record date.
■■First foll. 3-for-1 stk. split.
§§—First foll. pub. distribution of stk.
▲—On arrears.
**—5% subject to ratification of shhldrs.
♦—First foll. 4-for-1 stk. split.
•—Participating.
••—3 com. shs. for ea. 100 com. shs. held.

Unlisted Industrials

(Compiled by McDonnell, Adams & Co. Ltd., Toronto)

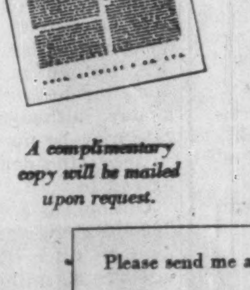
	Bid	Asked
Alexander Bldg	16.00	....
Anglo Canadian Tel. A	39.50	40.25
Border Chemical	4.25	4.75
Brinton Pete Carpet	48.00	....
British America Assce.	103.00	106.00
British Mtge. & Trust	250.00	....
British Newfoundland	2.37	2.87
Cdn. Admiral Corp.	....	15.00
Can. Canners B	11.00	11.75
Cdn. Corp. Management	8.00	8.75
Cdn. Foreign Sec's	8.00	9.25
Cdn. General Insce.	500.00	....
Capital Wire Cloth	20.00	....
Cawthra Apts.	58.00	....
Commercial Life 20% paid	32.50	....
Commercial Finance	63.00	....
Concourse Bldg.	140.00	160.00
Copp Clark 6% pfd.	80.00	83.00
Crown Life Insce.	185.00	....
Debentures & Secs. pfd.	80.00	....
Dollar Land Corp. Units ($100, 7% deb. & 6 common)	162.00	166.00
Dom. Can. Gen. Insce.	44.00	48.00
Dom. Linseed Oil units	3.00	....
Dom. Life Assce.	167.00	197.00
Eastern Trust	26.00	27.50
Eastern Trust Rights	1.25	....
Essex Packers pfd.	32.00	....
Do. common	2.25	....
Excelsior Life	250.00	300.00
Goderich Elevator	17.50	18.50
Granite Club	14.00	15.00
Gt. Britain Can. Inv. pfd.	85.00	....
Do com.	18.00	20.00
Great-West Life	320.00	....
Guar. Co. of N.A. fully pd.	100.00	115.00
Do 30% pd.	63.00	....
Halton & Peel Trust	12.00	13.00
Hart Battery (1957) units	3.00	....
Hees, George $6 pfd.	....	25.00
Hudson's Bay Co.	23.50	24.00
Humberstone Shoe	7.00	8.00
Industrial Mtge. & Trust	109.00	....
Ingersoll Machine 4% pfd.	80.00	....
Do B	3.00	4.00
Jenkins Bros.	60.00	65.00
London Life Insce.	170.00	174.00
Lord Simcoe Hotel A	.65	.85
McCarthy Milling A	4.25	5.00
Manufacturers Life (P)	257.00	....
Do (2P)	250.00	....
Do (3P)	245.00	....
Do (UP)	240.00	....
Maritime Life	130.00	150.00
Meadowvale Development	2.80	3.25
Mindustrial Corp.	1.50	1.60
Monarch Life	47.00	54.00
Mutual Finance Corp. pfd.	.75	....
National Life Assoc.	59.50	61.50
Pacific Western Airlines	....	2.00
Park Lawn Cemetery	2.25	....
Pembroke Electric Light	100.00	....
Phillips Electrical	5.75	6.25
Prairie Royalty Trust	1.75	....
Prudential Trust	21.00	....
Rapid Grip 6% pfd.	97.00	99.00
S.K.D. Mfg. 6% pfd.	9.25	10.00
Scott Misener S.S.	14.25	15.00
Sovereign Life 25% Paid	175.00	195.00
Steelman Gas.	2.25	2.50
Standard Fuel 4½% Pfd.	34.00	35.50
Teleflex Ltd.	15.75	16.75
Thompson Paper pfd	45.00	48.00
Tor. & London Inv's	2.00	2.50
Trans-Canada Freezers warr.	1.00	....
Tor. Medical Arts Bldg.	57.00	62.00
Triarch Corp.	112.00	115.00
Universal Cooler 6% pfd.	53.00	....
Do. B pfd.	2.00	3.00
Do com.	1.40	....
Waterloo Mfg.	8.25	....
Waterloo Trust	46.50	47.25
Westcoast Transmission	10.75	11.25
Western Assurance	80.00	83.00
Western Life 25% paid	104.00	....

P—Original Pledged
2P—Second Pledged
3P—Third Pledged
UP—Unpledged

By Kippen & Company Inc., Montreal

	Bid	Asked
Cons. Theatres A	6.50	8.00
Do B	2.00	....
Dupuis Freres Ltd.	14.50	....
Guarantee Co. of N. A.	100.00	120.00
Great Britain & Canada	18.00	20.00
Hart Battery Units	3.50	....
Hudson's Bay Co. (new)	23.00	23.75
Maritime Tel. & Tel.	16.75	17.50
Mtl. City & Dist. Svgs. Bk.	55.00	57.00
New Brunswick Tel.	11.50	12.25
Ont. & Que. R. 5% Ctp. Stk.	95.00	100.00
Prudential Trust Co	17.00	....
Westcoast Transmission	10.75	11.25

A Detached View ....



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June Contents

- Letter From New York
- The Variety Chains
- Stedman Bros. Limited
- Review and Opinion
- Selected Investments

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ANNOUNCEMENT

TRADERS FINANCE CORPORATION LIMITED

J. S. BUCK

Manager Industry Relations Special Products

W. J. Carey, Vice President — Sales, announces the appointment of Mr. J. S. Buck to the position of Manager — Industry Relations — Special Products.

Mr. Buck joined Traders in Toronto in 1947. He was appointed District Manager in Hamilton in 1949. Since that time Mr. Buck has been Regional Sales Manager in Toronto and most recently was Manager of the Special Products Division at Head Office.

In his new position Mr. Buck will coordinate contacts with Manufacturers, Distributors and Dealers in the Special Products Division of the Company's Purchase Credit Services.

The Globe and Mail Not Up for Sale

Contrary to persistent rumor in the financial community, Toronto's morning newspaper, The Globe and Mail, has not been sold.

The publisher states categorically that G and M "has not been sold and is not for sale."

Guessing Game Over Ventures

Sharp pencils probe meaning of new look in Ventures Ltd. streamlining . . .

By FRANK KAPLAN

The proposed merger of producing **Giant Yellowknife Gold Mines** and prospect **Consolidated Sudbury Basin Mines** is the latest step in a series aimed at streamlining the **Ventures Ltd.** organization.

Ventures acquisition of the main assets of **Frobisher Ltd.** (**FP**, May 28, June 4) was the first big move in the streamlining process.

Now financial analysts are busy trying to draw theoretical pictures of the future Ventures organization and its relationship with its controlling company, **McIntyre Porcupine Mines.**

The key answer sought: What will be the effect of past and possible future streamlining on the stock prices of McIntyre and Ventures?

Biggest unknown: What price will Ventures be willing to pay to achieve the better organized setup it seeks?

While they may not prove possible of achievement because of unforeseen technicalities or changes in conditions, here are some of the basic objectives that appear to lie behind the group's recent actions, based on discussions with market analysts, industry sources, and officials of the McIntyre-Ventures group:

- **Ventures is trying to eliminate** the string of holding and non-producing companies built up over the years. These include **Hoyle Mining, Quebec Metallurgical,** as well as Frobisher.
- **Operating companies (producing mines) will continue** as separate entities but shares held in producers will concentrate directly in Ventures.
- **If this principle of eliminating** interlocking strings of holdings companies in one group is followed to its ultimate, it would appear that eventually McIntyre Porcupine (holder of 26% of Ventures) would wish to absorb the end version of Ventures.

It should be noted that H. J. Fraser, Ventures president, has observed that he did not believe it would be economic sense for Ventures to disappear in McIntyre (**FP**, June 4).

The reason for this plan:

▸ To move up dividends from operating and profitable mines now held indirectly so that the cash goes directly into the Ventures treasury. For example, no companies are expected to be left sitting between Ventures and a dividend from **Opemiska Copper** (controlled by Hoyle and expected to pay dividends this year) or **Kilembe Copper Cobalt** (run by Frobisher).

▸ A corollary effect would be to make Ventures market price more closely reflect the market value of its principal operating companies. For example, the break-up of Frobisher as of April 30 is reported at $3.26 a share. This includes holdings like $4,275,000 of Falconbridge, $6,280,000 of Kilembe (at market). But Frobisher shares at $1.77 are at about a 46% discount from break-up value.

The $3.8 million market value of Ventures' holding in Frobisher (at April 30 as reported in the documents accompanying the offer to acquire Frobisher assets) was the value of 2,400,398 Frobisher shares trading at a discount of 46% (or 54% of break-up value).

Indirectly, the Falconbridge, Kilembe and other shares held by Frobisher are also discounted.

The advantage of eliminating the Frobisher shares becomes quickly apparent. Simply, Ventures' portfolio reflects a little more than half the value of the Falconbridge and other shares held by Frobisher.

If he wants to sell his stock, the Ventures shareholder in effect would get only one-quarter of his share of the investments held by Frobisher. (Ventures stock is about 56% of break-up value.)

The chain in this one instance is complicated enough. But the picture to a Ventures shareholder can become even more confusing. Look at the case of Frobisher's holding in Quebec Metallurgical Industries (1,149,249 shares).

For QMI (also mainly a holding company) trades at a 25% discount from break-up and in turn, also holds 125,000 Frobisher shares, 47,259 **Giant Yellowknife Gold Mines** and 67,046 **United Keno Hill.**

By the time the market's evaluation of some of these shares sifts down, the proportionate value seen by the owners of the parent Ventures can get pretty small.

In contrast, look what happens in other firms where dividends go directly to the parent company from the operating mine. First, Ventures' parent—McIntyre Porcupine.

- **McIntyre break-up value of liquid assets** (excluding any consideration of plant, mine etc.) is estimated at about $33.30 a share. This is based on the annual report for year ended Dec. 31, 1959. McIntyre trades at about $24.50 recently.

Result — McIntyre is trading at a discount of about 26% from ready break-up.

Note that McIntyre's producing subsidiaries—**Castle-Trethewey** and **Belleterre** — were absorbed last year.

A second mining organization that might be considered for comparison is **Dome Mines.** Dome controls **Sigma Mines** and **Campbell Red Lake Mines,** has substantial interest in **Dome Petroleum** (all listed on the Toronto Stock Exchange).

- **Dome's ready break-up value** (including consideration of its **Mattagami Lake Mines** interest, excluded in the annual report) is calculated by **FP** at about $24.50 a share. Also based on the annual report for year ended Dec. 31, 1959.

Result — Dome at $18 a share is trading at a discount of about 27% from break-up.

Analysts are letting their imagination wander when they say:

"If Ventures were trading at a discount of 25% from break-up, it would be at about $32 compared with the present market of $24."

The key reason for the market's different evaluation of what are, in many respects, similar organizations is:

Nothing between dividend producer and parent in the case of Dome but many hurdles between a dividend from some producers in the case of Ventures.

A hypothetical illustration: Any future dividends from **Kilembe Mines** in Africa would (under the present chain of command) have to go to Kilembe Copper Cobalt, to Frobisher, to Ventures, and finally to the individual Ventures shareholder.

But, it isn't an easy matter to calculate the end result — the final Ventures Ltd. — that could result from a policy of streamlining to producing mines, eliminating interlocking holdings and holding companies through a series of mergers.

Ventures itself has been working on the new look for the last three years, at least since McIntyre Porcupine took the dominant interest in July, 1957.

The big problem for the analyst and shareholder is to visualize what Ventures will finally look like, particularly in outstanding capitalization.

What price will Ventures pay to absorb the assets of its Hoyle, QMI, Coniaurum and whatever else is planned?

How many shares of Ventures will eventually be outstanding?

In the case of Frobisher, one Ventures share is offered to holders of every 13 Frobisher shares (about on the button on the basis of break-up values shown by Ventures). This means 335,995 Ventures shares are to be issued.

Undoubtedly, more stock would be issued if the projected absorptions are carried along.

Estimating (1) what Ventures will look like (2) the value the marketplace will place on the new Ventures and finally, what this all means to McIntyre, is the latest Bay Street amusement. Not only is it something to do during these days of quiet mining stock markets, it could also prove profitable.

Discounts in Ventures Group

	Recent Market $	Est. Break-Up $	Discount From Break-Up %	*Ventures Interest %
Frobisher	1.77	3.26	46	35.8
Ventures	24	42.62	44	...
Hoyle	3.35	4.40	24	76.1
Quebec Metallurgical	.60	.80	25	39.5
Coniaurum	.50	.60	17	66.9

*Giving effect to Frobisher deal.

ANNOUNCEMENT

SPARTAN AIR SERVICES APPOINTMENT

B. A. CHALMERS

Mr. R. J. Reynolds, president of Spartan Air Services Limited, announces the appointment of Mr. B. A. Chalmers as executive vice president of the Company, effective May 2, 1960.

Mr. Chalmers, who was formerly president of Bristol de Mexico S. A. and is a vice president and director of The Bristol Aeroplane Company of Canada Limited, will be responsible to the president for the overall operations of Spartan, including the activities of both the Survey and Helicopter Divisions.

Responsibility for Bristol's Latin American interests is being assumed by Mr. W. S. Haggett, executive vice president of The Bristol Aeroplane Company of Canada Limited.

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NOTICE TO THE SHAREHOLDERS

OF

MURRAY MINING CORPORATION LIMITED

REGISTERED AND UNREGISTERED

I will be at the Lord Simcoe Hotel of Toronto, Canada, in the Ontario Room, 2nd Floor, on Tuesday, June 21st, at 8 p.m., and will be happy to meet the shareholders and discuss with them the affairs of the company. Also, I have written a second letter to the shareholders under date of June 16th, and you can get your copy by writing to

PAUL PAYETTE

1610 SHERBROOKE STREET WEST, SUITE 56

MONTREAL, CANADA

FOR IMMEDIATE RELEASE —

-REPORT TO ALL INVESTORS-

FROM OUR RESEARCH STAFF . . .

- SUBJECT — A variety of Industrial securities that advanced to levels where Research Department advised partial liquidation for cash gains; that subsequently filled back through advised stop-loss orders where remainder of profits were taken, and that since have scaled down to near originally recommended accumulation zones — in some instances their former springboard bases of 1957-58.
- PROCEDURE — review and follow-up of each situation vis-a-vis new or proposed corporate developments; current financial structure; competitive position in industry; projected long-term growth trends; prospects for the medium term; earning power; improvement or deterioration of general corporate image, of shareholder morale and especially of management.
- STAFF DIRECTIVE — from criteria established in terms of the foregoing, to select those situations that best qualify for re-accumulation instructions in June-July issues of THE CANADIAN FORECASTER.

MEMO to all clients who have been contacting Investment-Help Service for buy, sell, hold, stop-loss instructions re Creative Telefilms, Massey Ferguson, Dominion Tar, MacMillan & P.R., Walker's, C.P.R., Bell Telephone, B.A. Oil, Murray Mining, Latin American, Mt. Wright, Dynamic Petroleum, Jockey Club and National Steel Car—our opinion remains the same.

ATTENTION INVESTORS — Research Department believes you'll find upcoming reports on industrial securities (in our eight-page weekly bulletin on Canadian stocks and the market) as well as our Investment Help Service (without additional cost) particularly helpful at this turning point in the trading season. **Cordially invite you to write THE CANADIAN FORECASTER, 238 Adelaide Street West, Toronto. 60-day trial —$5 ($5.50 airmail). Annual subscription—$45. Phone—EMpire 4-5421-2.**

Decision Nears On Bethlehem

From Our Own Correspondent

VANCOUVER—One big copper deal concluded, and a party interested in iron ore on the way to Canada's west coast.

That's the shape at the moment of increasing Japanese interest in British Columbia minerals.

The **Sumitomo** group's deal with **Bethlehem Copper Corp. Ltd.** has already put $350,000 into the B. C. company's treasury (**FP**, Feb. 10). It also provides that the Japanese would put the Bethlehem property into production at a cost estimated between $7.5 and $9 million.

The Japanese must make a production decision by Feb. 28, 1961.

As terms of the agreement were announced, word came from Tokyo that a group interested in iron ore was on its way to B. C. The party will look over iron ore properties on Vancouver Island.

At Bethlehem, minimum production rate would be 3,000 tons a day, although the starting rate may be up to 5,000.

Here's the deal the Japanese agreed to:

Options to acquire up to 1,700,000 shares of Bethlehem at average price of $1.81, if they advance $9 million.

A second choice of financing is open to Sumitomo.

It may provide funds through loans secured by mortgages, and prior to Dec. 31, 1962 would be able to purchase 300,000 Bethlehem shares at $1.40 a share.

Sumitomo has also taken an option on a 5,000-ton mill now owned by **Manitou-Barvue.**

The idle mill is on the Barvue property in northwestern Quebec. Purchase price would be **$1.5** million of which $100,000 **has already been paid.**

Rosin Size Pricing

Hercules Powder Company (Canada) Ltd. has announced that for the third quarter of 1960 the price of their 70% Pale Pexol Rosin Size will be $13.36 per 100 lbs. in tank cars, f.o.b. their plant at Burlington, Ontario.

Hercules Powder Company (Canada) Ltd.

1980 Sherbrooke West

Montreal, P.Q.

ANNOUNCEMENT

AREA MINES DIRECTOR

MR. JACQUES DE BILLY, Q.C.

J. M. R. Corbet, President of Area Mines Limited, announces the election of Jacques de Billy, Q.C., to the Board of Directors of the Company. Mr. de Billy is a partner in the legal firm of Gagnon, de Billy, Cantin & Dionne of Quebec. He is a director of Gatineau Power Company, Royal Globe Insurance Group, Desjardins Mutual Life Assurance Company, and other companies.

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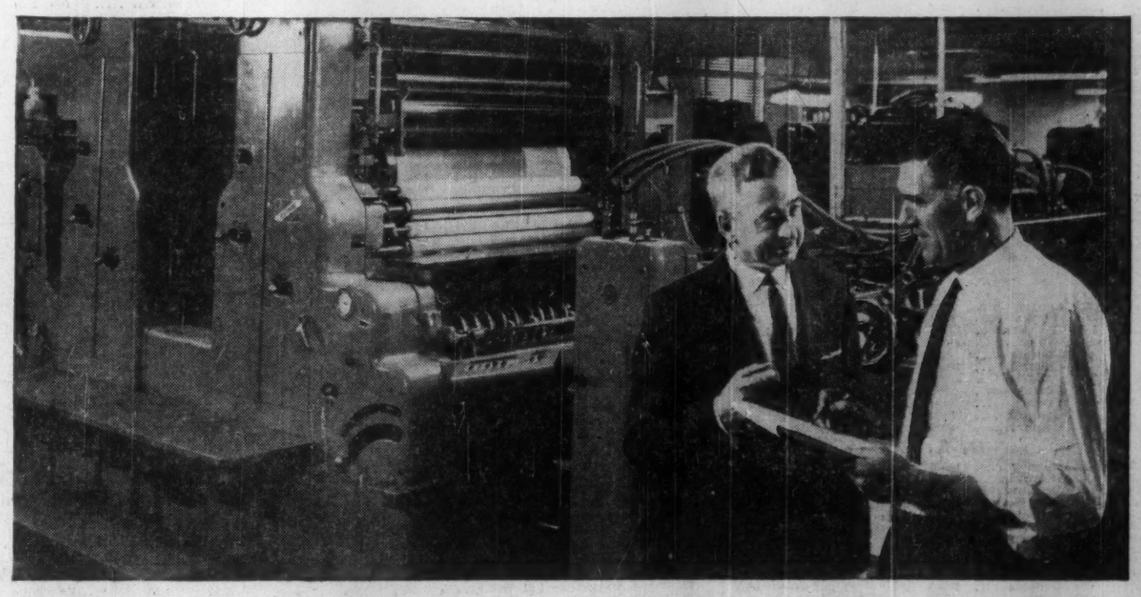

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Taking Stock

What's going on in the mining and oil markets — the facts and rumors.

By ALEX WILSON

ASBESTOS shares have been holding their own in recent weeks, bolstered by prospects of better sales this year. Some analysts predict world-wide sales will spurt to record levels this year.

The strength of the outlook has sparked strong price moves in several prospects struggling to justify production.

Although Canada provides bulk of free world asbestos supplies, there are signs of increasing competition from foreign producers.

Plans were recently announced for 2,000-ton operation in California sponsored by **Jefferson Lake Sulphur** of New Orleans. Over 25,000 ft. of drilling has proven 15 million tons of "excellent grade and quality" asbestos ore, mineable by open pit. Mining is scheduled for early 1961.

Effect of this new producer on upcoming decisions by Canadian firms is not known. **Advocate,** backed by **Johns-Manville** and **Patino of Canada** is expected to make a decision on its Newfoundland deposit this summer. And **Murray Mining** is still trying to establish sufficient ore reserves on its Ungava property to justify production planning.

Here is how some asbestos stocks have bucked the lower price trend in many other mining stocks since April:

	Latest	End April	1960 High	1960 Low
	$	$	$	$
Asbestos Corp.	24¾	25	26¼	20⅝
Advocate	3.55	3.20	3.65	2.60
Cassiar Asbestos	12½	12¼	13¾	10⅞
Murray Mining	.67	.46	.80	.35
United Asbestos	4.55	3.55	5.20	3.45

* * *

Situation in the uraniums is still unsettled as officials wait for word from Ottawa on contract juggling proposals. **Rio Tinto's** bid for both **Stanleigh** and **Stanrock** is hanging fire until approval comes. It is believed that the S.E.C. in the U. S. has passed on the plans. And rumors were circulating this week of an impending announcement from Ottawa giving approval. Under terms of the proposals, this approval would have to come by June 30. As the stories circulated, Stanleigh stock climbed to 48c from recent 38c. Behind the move, is talk that if the purchase by Rio goes through, 50c in cash would be paid for each share of Stanleigh. Stanrock is still at year's low of 25c.

Elsewhere in uraniums, **Bicroft** reports little change in net profit last year. Shares hold at 50c at mid-week as company reports net of 44 1/3c a share in 1959, down by ½c a share.

* * *

On the merger beat, **Ventures** and **Frobisher** trade "on the button" as opposition to the proposal fades. On the basis of the proposed takeover of Frobisher assets by Ventures (1 share Ventures for every 13 Frobisher held), the purchase of 13 shares of Frobisher at $1.70 gives call on Ventures stock at $22.46 (including brokerage). Ventures was trading at $22½ at mid-week.

The spread in the other Ventures proposal—merger of **Giant Yellowknife** and **Consolidated Sudbury Basin**—is wider. At mid-week, 25 shares of Sudbury (equivalent to one share of Giant under the plan) at 32c would give call on Giant stock at about $8.20 a share including brokerage. Giant was trading at $9.10, off from $9.25. Both deals still have to be approved by shareholders in meetings called for later this month.

* * *

Orchan Mines weakens to $1.11 at mid-week as company releases annual report. The report reveals that as of April 15, ore reserves on the Mattagami area property are estimated at 3,560,000 tons grading 12.39% zinc, 1.25% copper, 0.014 oz. gold and 1.26 oz. silver per ton. Work is continuing in the drilling to outline the No. 3 ore zone, discovered early this year. Future plans are not mentioned in the report nor is fact that **Noranda** now holds 35% share interest. Noranda shares bounced ahead $1.25 in one trading session this week to $37¼. The recovery follows sag to new low of $36.

Consolidated Halliwell firmed at mid-week to 49c, ahead from 46c as a progress report in the annual report of parent **Consolidated Mogul** indicates that production is scheduled for July. Consolidated Mogul is ahead 4c at 90c.

* * *

ON THE OIL AND GAS FRONT: As **Canadian Husky** gets ready to list its shares on U. S. stock exchanges, it announces a $1 million work program at its Port Arthur refinery. Among the items included, provision to receive oil by tanker, as an alternative to existing pipeline facilities. At $5.40, stock is off from recent $5.70.

Dynamic at $1.13 continues to weaken after its recent spurt to $1.53. The spurt was sparked by an oil discovery well in which the company participated in the Jenner area.

Consolidated Mic Mac reports a net loss of $29,581 in 1959, down from a profit of $101,827 in previous year. The stock is still hovering near the year's low of $1.90.

French Pete Boosts Oil Sales

French Petroleum Co. of Canada boosted oil output by 34% in the first quarter this year over the full year 1959. Daily output in the latest quarter was 1,730 bbl.

Total income in the period, after royalty and production costs was $335,395.

Participations were taken in 18 wells in the quarter of which 10 were development wells resulting in nine successful wells. Of the eight exploratory wells, four were abandoned and the others were still drilling at the end of the quarter.

Land acquisitions in the quarter included a 50% interest in 235,260 acres in the Wrigley area of N.W.T.

This brought total land holdings to 5,389,612 at the end of March, equivalent to 1,565,985 net acres.

Ore Royalty B. C. Answer To Tax Bar?

A royalty on iron ore mined is expected to be British Columbia's reply to a decision by the Supreme Court of Canada which declared invalid B. C.'s tax on ore in the ground.

B. C. officials are believed to have asked prospective producers to submit a draft agreement in an effort to develop a charge under which the mines feel they can operate.

Mining company officials say B. C. feels certain that a royalty would stand up.

Therefore the industry must try to work out a suitable level. Both sides are said aiming at a royalty of not more than 25c a ton.

While the Supreme Court decision grew out of an appeal from a tax assessment by **Texada Mines** (an iron producer on Texada Island), it affects other iron producers and several properties with prospects of production.

Empire Development, Nimpkish Iron, and **Haulpai Ltd.** also ship iron concentrates.

Frobisher has a property considered a likely producer under favorable tax conditions and **Noranda Mines** and **Silver Standard Mines** are also considered likely new producers.

The Supreme Court declared the B. C. Mineral Property Taxation Act as unconstitutional because it imposed an indirect tax, a tax area reserved to the Federal Parliament.

While mining companies had protested attempts to levy taxes on iron producers since the legislation came out in 1957, they were mainly concerned about the principle of such a tax on ore in the ground.

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ANNOUNCEMENT

READER'S DIGEST APPOINTMENT ANNOUNCEMENT

E. PAUL ZIMMERMAN

The Reader's Digest Association (Canada) Limited announces the election of E. Paul Zimmerman as President and chief executive officer.

Mr. Zimmerman, who will be located at the company's head office in Montreal, joins Reader's Digest from Canadian Westinghouse Co. Ltd. where he was General Manager of the Consumer Products Division. Prior to joining Canadian Westinghouse, Mr. Zimmerman was associated with Canada Packers Limited. During the war he served with the Royal Canadian Ordnance Corps.

When Does a Blast Cleaning Machine Become Obsolete?

Scores of Canadian firms have taken the progressive viewpoint that any production tool, including a blast cleaning machine, becomes obsolete whenever a better tool becomes available to do its job at lower cost.

Such a tool is the Wheelabrator Super Tumblast. Management of a prominent Ontario malleable foundry analyzed its blast cleaning barrel, two tumbling barrels, and one rumbling barrel — all working well, but unable to deliver sufficient production. They replaced this battery of cleaning equipment with one 7-cu. ft. Super Tumblast, and thereby increased cleaning capacity, improved cleaning quality, and reduced actual cleaning costs substantially.

Wheelabrator Takes the Guess-Work Out of Heavy-Duty Blast Cleaning

With more than 200 Super Tumblasts in service, Wheelabrator has more heavy duty blast experience than is available anywhere else. Complete engineering, installation, maintenance and parts service are available from Wheelabrator Corp., Canadian Div., P.O. Box 490, Scarborough, Ontario.

WHEELABRATOR
AIRLESS BLAST EQUIPMENT

Devon-Palmer Sales Climb

Devon-Palmer Oils had an estimated net profit of $7,000 in the quarter ended April 30, of the company's fiscal year.

The improvement from last year's loss of $121,000, in the same period, reflects absence of drilling activity. Devon sold its drilling rigs in December.

In addition to the lower operating costs, Devon boosted daily oil output by 23% to 2,380 bbl. in the latest period.

And gas deliveries more than doubled, reaching 16.6 million cu. ft. daily, ahead from 7.6 million.

Here are the first quarter results:

	3 Months to April 30 1960	1959
	$	$
Gross revenue	498,000	430,000
Production costs	277,000	288,000
Depreciation	214,000	263,000
Net profit	7,000	*121,000

*Net loss.

Worth Noting

Financing agreements and changes in financing deals, major changes in capital, filing statements are listed as reported by the Toronto and Montreal exchanges, Ontario Securities Commission.

BETHLEHEM COPPER CORP., TSE filing statement in respect of agreement with **Sumitomo** interests of Japan, whereby latter will have option of providing funds to place company's property into production.

CHIBOUG COPPER CORP., option instalment of 175,000 shares at 25c a share not exercised and agreement terminated.

MANITOU-BARVUE MINES, agreement with **Sumitomo** interests of Japan, whereby latter have acquired option to purchase company's plant, building, machinery and equipment at the idle Barvue mine in Quebec; total price if exercised would be $1.5 million of which $100,000 has been paid.

WINDY HILL MINING CORP., release of 180,700 shares from escrow.

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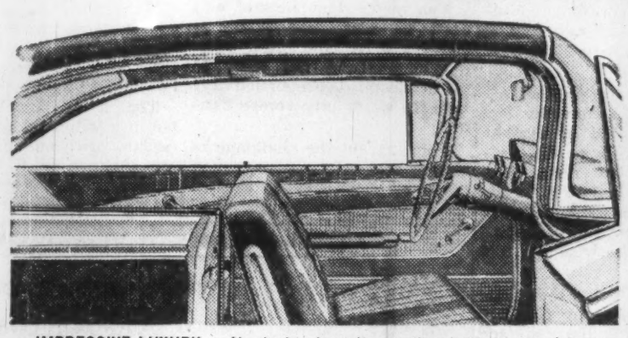
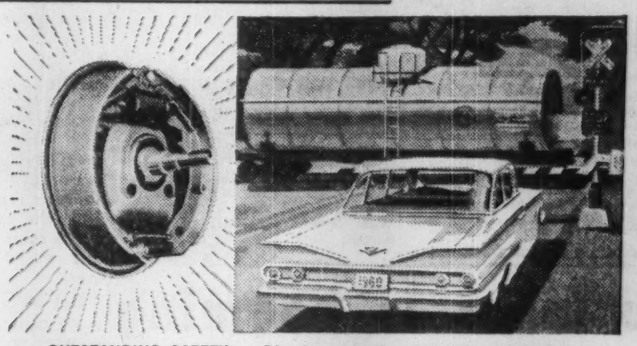
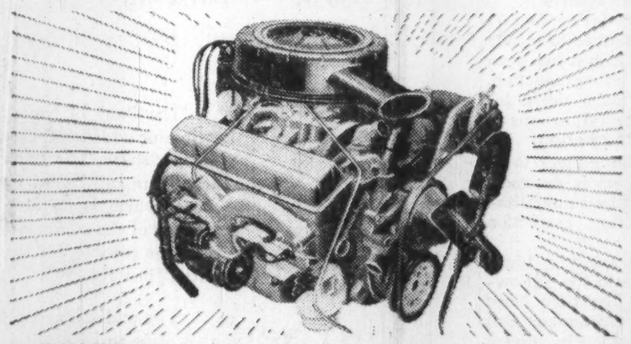


IMPRESSIVE LUXURY — No doubt about it, no other low-cost car gives you anything approaching Chevy's elegance. In fabric, trim, color, this is 1960's most beautiful car. It's practical beauty, too . . . designed to give you a car-life of faithful, trouble-free satisfaction.

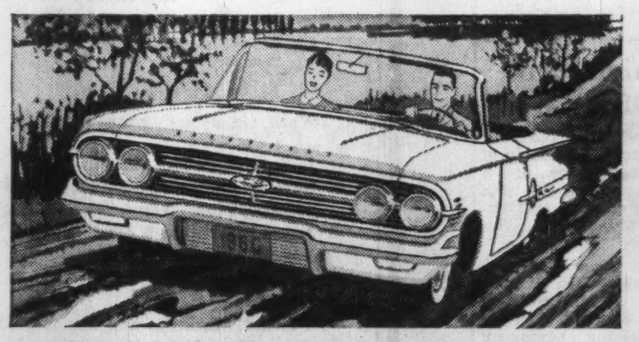


OUTSTANDING SAFETY — Big, longer-lasting Safety-Master brakes — rigid Unisteel body construction—plus the unbeatable dependability of the Safety-Girder frame — make Chevy the most solid, safest, quietest-riding car you can buy in the low-priced field.

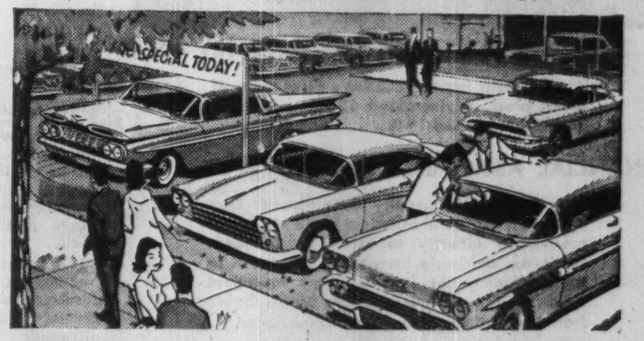


VIGOROUS V8 or 6 — The most famous, most efficient power plants in Canada — two of the reasons why Chevrolet lives up to its reputation for breathtaking performance and response. Prove it to yourself soon. Put a '60 Chevy through its spirited paces.

THRIFT AS ONLY CHEVROLET KNOWS IT! — Chevrolet engineers are masters at building cars that squeeze the most miles out of every tankful of gas. And the host of engineering advances built into every Chevy mean you slash upkeep costs . . . enjoy years more trouble-free driving pleasure.



SUPERLATIVE SMOOTHNESS — The big secret is Full Coil suspension. A big husky coil spring at each wheel absorbs every shock and vibration like magic, before they reach the passenger compartment. And new formula rubber body mounts eliminate even road noise to an amazing new degree.



UNBEATABLE TRADE-IN VALUE — Every Chevrolet dollar you spend represents a sound, reward-paying investment. In initial cost, day-by-day upkeep, right through to trade-in time, this is the car you'll be glad you own. Drive one soon. Arrange it with your Chevrolet dealer.

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ANNOUNCEMENT

LESLIE R. MUIR, C.L.U.

Charles C. Martin, Director of Agencies of The National Life Assurance Company of Canada, has announced the appointment of Leslie R. Muir, C.L.U. as Special Representative at Home Office in Toronto.

Mr. Muir has been with the Company for six years. He is a Director of the Life Underwriters Association of Canada and Chairman of its Public Relations Committee.

SUBMERSIBLE PUMP

An electric, full submersible 4 in. pump for handling sludge and slurries, viscous liquids and muddy water containing silt, weeds and other solids has been introduced into Canada by the **Stenberg Corp. of Canada,** Montreal.

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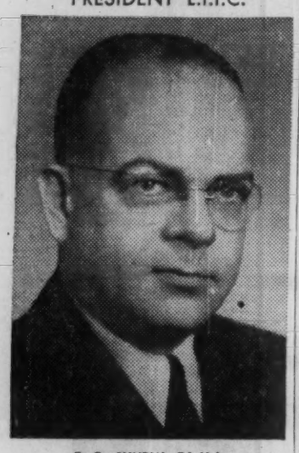
PRESIDENT L.I.I.C.



F. G. SHURLY, F.L.M.I.

Associate Secretary of The Imperial Life Assurance Company of Canada, who has been elected President of The Life Insurance Institute of Canada. This is a national organization formed to promote and cultivate a thorough knowledge of the life insurance business. Mr. Shurly is the sixth Imperial Life member to have held the presidency of the 61-year-old Institute.

One Giant Share For 25 Sudbury

Here are terms for proposed merger of Giant Yellowknife and Sudbury Mines . . .

Here is the merger plan that shareholders of **Giant Yellowknife Gold Mines and Consolidated Sudbury Basin Mines** will consider at meetings of both companies on June 27:

- **Giant agrees to sell its mine** to Consolidated Sudbury Basin for book value of $3,849,665, if
- **Sudbury Basin agrees to purchase** the mine at that price, and if
- **Sudbury Basin shareholders reorganize** on basis of one new share of Sudbury for each 25 old shares. This would mean that there would be 303,050 shares of Sudbury outstanding prior to the merger.
- **Then Giant and Sudbury agree to merge** into a new company **Giant Yellowknife Mines** on share-for-share basis, with total outstanding capital of 4,303,050 shares.

Effect of the arrangement is that Giant buys the Sudbury property and tax credit for equivalent of 303,050 shares. The step involving purchase of the Giant property by Sudbury before the merger, is a necessary step under provisions of the income tax act.

With Consolidated Sudbury shares trading at 32c at mid-week, Sudbury shareholders will be getting one Giant Yellowknife share for the equivalent of $8, a substantial discount from Giant shares at $9.10 at mid-week.

There will be tax credits of over $18 million for the new Giant. This includes development expenses of $7,410,554 from Sudbury, and undepreciated capital costs of $8,114,239 from Sudbury and $2,853,253 from Giant.

The development expenses can be written off by the company as quickly as possible as long as the write-offs don't exceeds profits in any year. The rate of application of the undepreciated capital costs is slower and depends on the depreciation rate of the capital equipment concerned.

The tax saving of these credits will be partially offset by an estimated annual charge of $90,000 to maintain the Sudbury property. In addition dividends of $181,830 a year would be payable on the additional Giant stock to be issued, if the indicated rate of 60c a share is maintained.

Giant Yellowknife will acquire a base metal property in the Sudbury area of which President A. J. Anderson stated "given sufficient time and effort, and better metal prices, we will have a mine."

The tax savings from the additional credits are expected to last over a seven-to-eight-year period.

As result of the merger, officials of both companies feel that Giant could undertake metallurgical work on the Sudbury ore — at lower cost than Sudbury could handle it. It additon the funds for such work would come from Giant revenue that would otherwise go into taxes.

But officials stress that there is no commitment by Giant to do work on the Sudbury ore and the decision would depend largely on metal prices.

Here is the background.

Sudbury Basin has a mineralized base-metal deposit in the Sudbury area which it has been unable to get into production. When original plans called for output in 1957, falling metal prices stopped the project.

Biggest stumbling block to an economic operation is the complex nature of the mineralization and resulting extraction difficulties.

Giant, which owns a high-grade gold mine in the Yellowknife area, has also been faced with difficult extraction. But extensive research in recent years has partially solved the problem and recovery has risen from 65% to as high as 88% although it averages around 83%.

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CFP 6-18

C-I-L Plant To Produce 'Vulcacel'

Canadian Industries Ltd. entered the organic chemical specialty products field with the announcement this week that it will build a plant at its Hamilton works to produce stabilized dinitroso pentamethylene tetramine, a blowing agent used in making certain types of cellular foamed rubber.

The plant will be housed in an existing building at the works.

Until now, the product has been imported and resold under the trade name "Vulcacel". This name will be retained for the Canadian-made material.

The chemical can be used to make foamed rubber with exceptional lightness, very low moisture absorption, compressibility and resilience.

These properties make it ideal for such end uses as soles for shoes, weather stripping for motor vehicles and buildings, and mechanical goods such as gasket material.

The plant will be stainless steel throughout to prevent possible contamination of the product through corrosion. Raw materials will consist of formaldehyde, ammonia, ammonium sulphate and sodium nitrate.

More Mobility Boosts Need For Housing

An "awesome" requirement for additional land and real estate development in Canada during the next 20 years was forecast by J. A. Lowden of Montreal, addressing the B. C. Association of Real Estate Boards in Penticton, B.C. recently.

President of the Canadian Association of Real Estate Boards, Lowden said every trend in modern living will demand an increase in land area per capita.

Vancouver alone, he said, will need an additional 50,000 to 75,000 acres of land and housing development in the next 20 years and this is proportionately true for every city across Canada.

Pointing out the challenge to skilled real estate management posed by social trends, he cited the change in family life. Canada is rapidly becoming a mobile society in which a reasonably average occupancy of the home will be only five years.

The sharp current drop in housing will tend to stiffen the market price on both new and older homes, W. S. Shorthill of Toronto, past president of CAREB, said. Government estimates of 120,000-125,000 starts for 1960 are totally unrealistic, he said, and, in his opinion, starts would likely fall to 85,000 to 100,000.

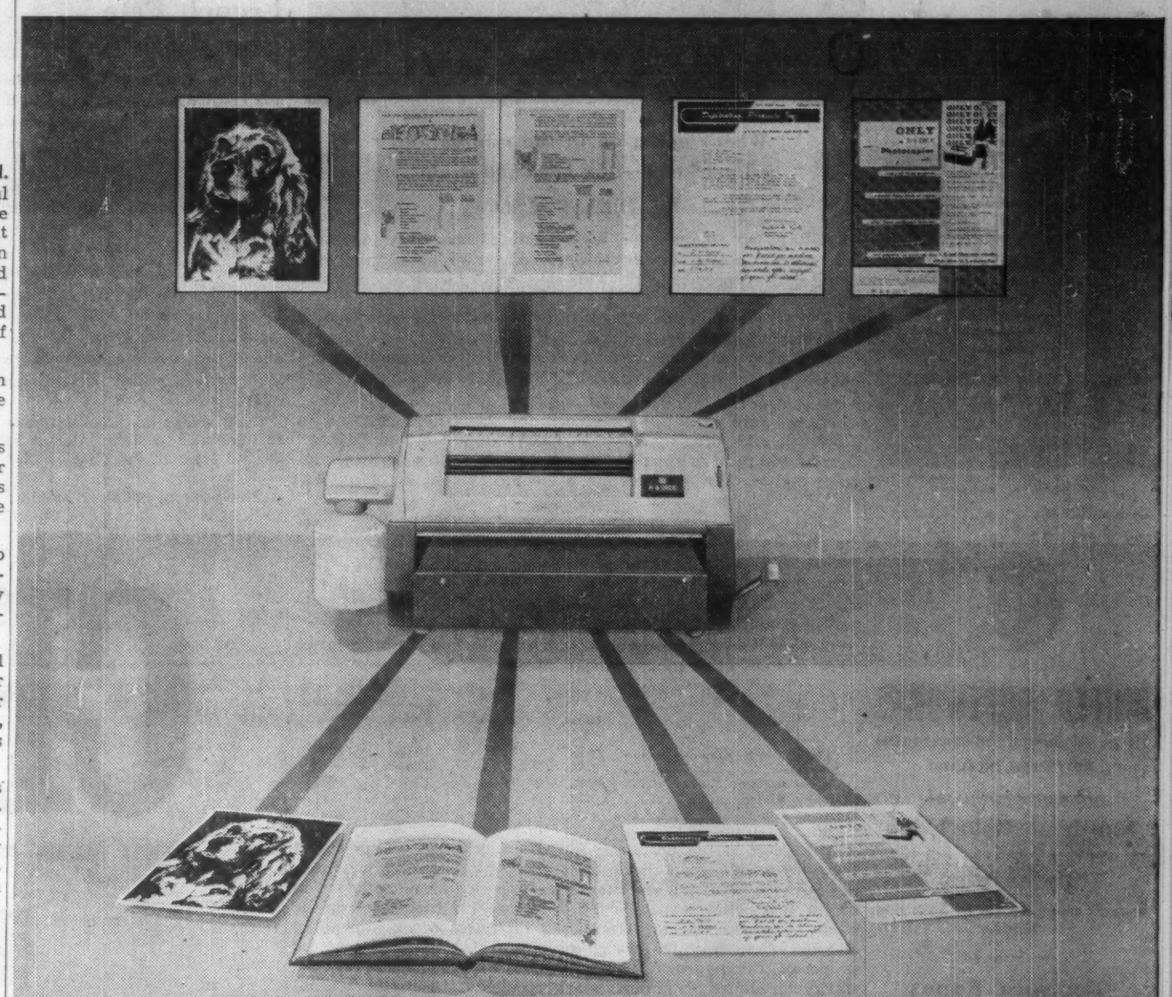
New officers:

Fred M. Philps of New Westminster, past president of the Westminster County Real Estate Board, was elected president of the B. C. Association of Real Estate Boards.

First vice - president, C. Brown, president Vancouver Real Estate Board; second vice-president, P. D. P. Holmes of Victoria, president of the Real Estate Board of Victoria.

Directors for two-year term: Harold Chivers, Vancouver; R. E. Slinger, West Vancouver; Lynn K. Sulley of Surrey; Ronald E. Dickie of Duncan, and Thomas C. Lambert of Nelson.

One-year directors: F. B. Urquhart of Vancouver; William Hyndman of Cloverdale; L. E. Kirk, Victoria, S. Hodge, Penticton, and John R. Harvey of Quesnel.



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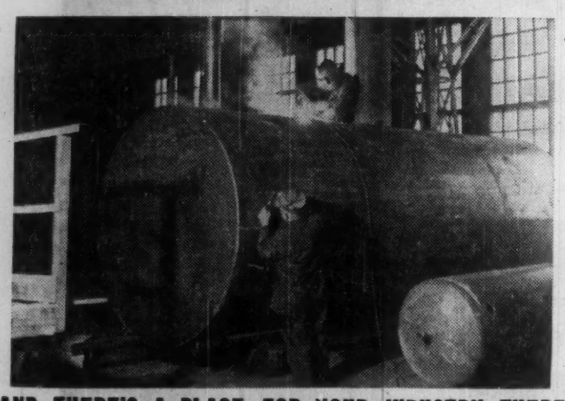

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In a five year period Brandon's gross value of goods produced increased 123%, while the population jumped 19%.

FINANCIAL ASSISTANCE AVAILABLE!

The Brandon Community Development Corporation has established a fund to assist prospective industry to locate in Brandon. Funds are available from this Corporation to erect buildings to the industry's individual specifications. Complete details are available from the Brandon Industrial Commissioner.

- **Fully serviced industrial sites available for immediate development.**
- **Low power rates. Coal, gas and electric power in abundant supply.**
- **Growing retail, commercial and residential areas.**
- **Excellent educational, recreational and hospital facilities.**
- **Versatile labor force.**
- **Extensive market area.**

FOR YOUR COPY OF—"An Economic Survey of Brandon", prepared by Midwest Research Institute — an independent organization — write:

INDUSTRIAL COMMISSIONER
BRANDON CHAMBER OF COMMERCE
BRANDON MANITOBA CANADA

Ultrasonics Firm Opens Office Here

Ultrasonic Industries (Canada) Ltd., newly-formed subsidiary of **Ultrasonic Industries Inc.,** of Albertson, N.Y., opened its first Canadian sales office at 1512 Eglinton Ave. W., Toronto, this week.

It's the first of several such companies contemplated by UI in development of international markets for its diSONtegrator ultrasonic cleaning equipment and other ultrasonic devices.

President of the Canadian firm is Julian Conway, who is also president of **Conway Electronic Enterprises Ltd.,** a company he founded five years ago.

The two companies are located beside each other, but will operate separately.

Active in the electronics and electrical instrumentation field, Conway got into ultrasonics two years ago, anticipating a big future in this field.

The Canadian firm, he told **FP,** will act autonomously, arranging for its own supplies, manufacturing its products under licence. It will sell to Canadian and Commonwealth markets.

Production should get under way in about two months.

The Bank of Nova Scotia

Additional Capital Stock

The Bank of Nova Scotia has offered to its shareholders of record June 10, 1960 the right to subscribe for additional capital stock on the basis of one new share for each four shares held, at a price of $42 per share. The Bank Act prohibits the provision of rights in respect of a fraction of a share. Each new share subscribed for by June 30, 1960, the record date of the quarterly dividend of 55 cents per share, which is payable August 1, 1960, will rank for such dividend in the proportion which the amount of the subscription payment received by the Bank on or before June 30, 1960 bears to the subscription price of $42. Full details of the offer are contained in a letter from the Bank to its shareholders dated June 10, 1960.

The undersigned syndicate of investment dealers and brokers has agreed to purchase from the Bank at a price to be negotiated all new shares not subscribed for at the close of business on September 16, 1960, the expiry date of the offer of the Bank, including all shares representing fractions.

Additional information concerning this offer of additional shares by the Bank may be obtained from any of the undersigned

Wood, Gundy & Company Limited — Harris & Partners Limited — Burns Bros. & Denton Limited

A. E. Ames & Co. Limited — Dominion Securities Corpn. Limited — Gairdner & Company Limited
Royal Securities Corporation Limited — Nesbitt, Thomson and Company, Limited — Greenshields & Co Inc
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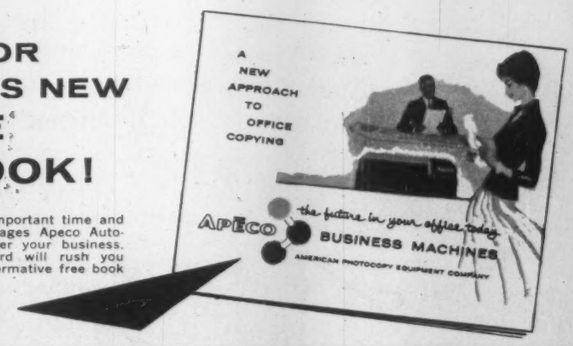

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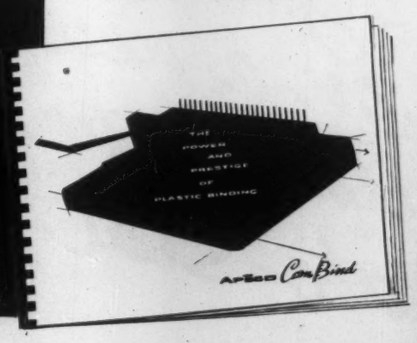

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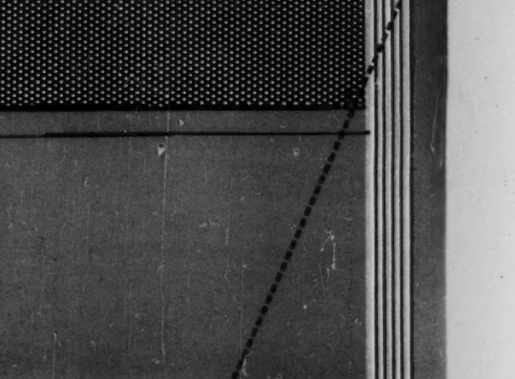

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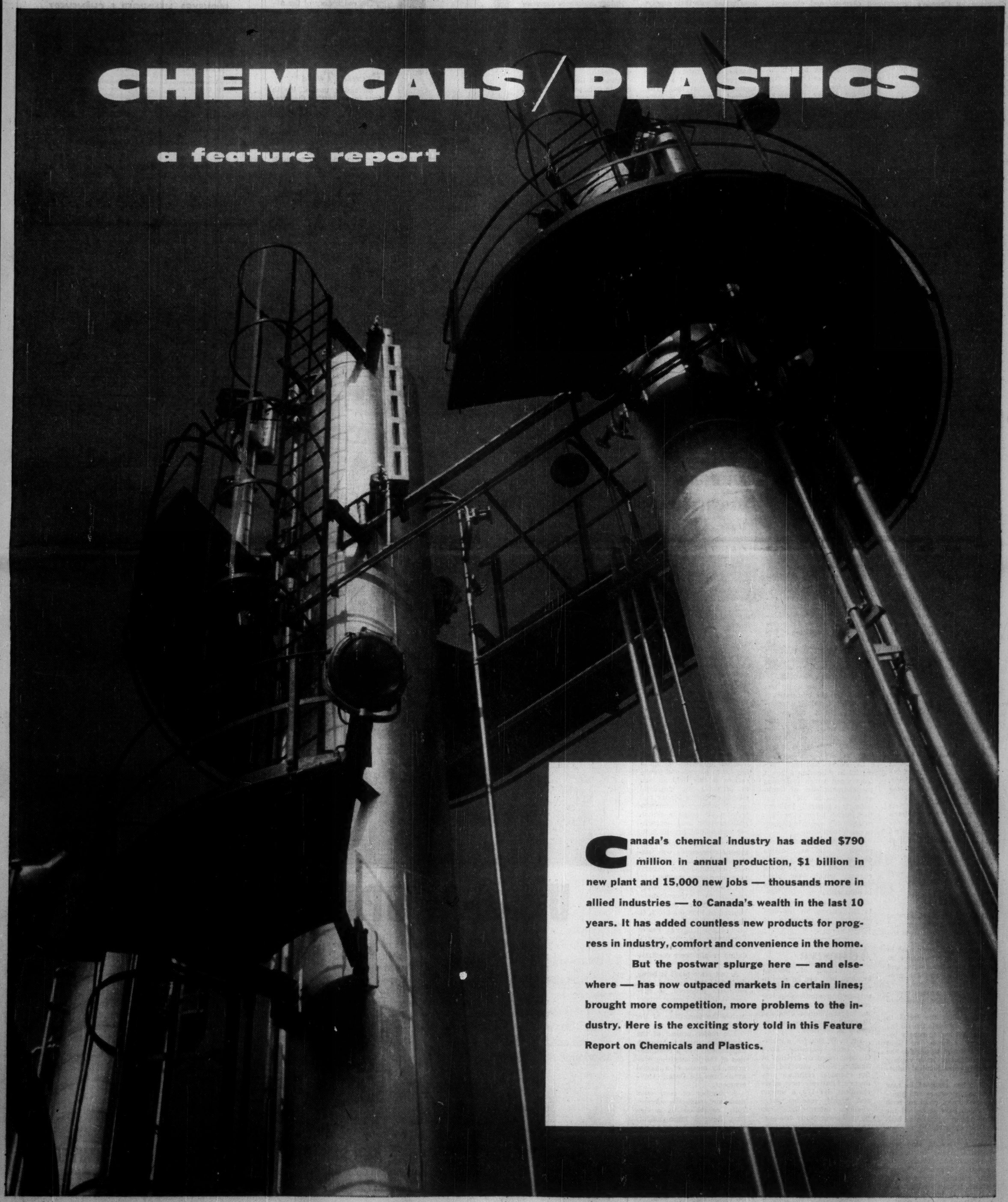
The Financial Post

Vol. LIV | Member of Audit Bureau of Circulations | Publication Office: Toronto, June 18, 1960 | Twenty-five Cents an issue, Eight Dollars a Year | No. 25

CHEMICALS / PLASTICS

a feature report



Canada's chemical industry has added $790 million in annual production, $1 billion in new plant and 15,000 new jobs — thousands more in allied industries — to Canada's wealth in the last 10 years. It has added countless new products for progress in industry, comfort and convenience in the home.

But the postwar splurge here — and elsewhere — has now outpaced markets in certain lines; brought more competition, more problems to the industry. Here is the exciting story told in this Feature Report on Chemicals and Plastics.

Chemists Report on New Research Projects

Exciting new studies on active nitrogen important in the development of rocket and satellite programs; methods to improve preservation of blood; interesting new approach to cancer research using metabolic antagonists; testing formaldehyde content in urban air — these are just a few of the topics discussed by Canada's top-ranking chemists and chemical engineers at the 43rd Canadian Chemical Conference of The Chemical Institute of Canada in Ottawa this week.

Here are digests of several of the papers and addresses.

Nitrogen

Continuing research on active nitrogen to find out more about its nature was outlined to the meeting.

Interest in active nitrogen is very keen because of its importance to the development of rocket and satellite programs and since it is one of the constituents of the upper atmosphere—above 90 miles.

The authors of the paper—C. A. Winkler, chairman, Dept. of Chemistry, McGill University, Montreal and Roger Kelly, Atomic Energy of Canada, Chalk River, Ont., reported that research is continuing to try and discover what is responsible for the activity of active nitrogen with different reactants. This activity is due largely, but perhaps not exclusively, to atomic nitrogen.

* * *

Blood Cells

Basic research on red blood cell metabolism in a continuing effort to improve the preservation of blood was outlined to the meeting by Dr. Rhoda Blostein, Montreal.

The research involved a study of the enzyme enolase which is one link of the glycolytic system by which the red blood cell converts glucose to lactic acid and obtains the energy necessary for carrying out its main functions.

Enolase is a relatively stable enzyme which does not suffer serious deterioration during storage of red blood cells up to a period of more than four weeks.

It is linked up, however, with other enzymes that are less stable and which play an important role in the collection of energy in the form of adenosine triphosphate.

This latter substance is of greatest importance in all living systems and it represents the immediate source of energy for the performance of all forms of work.

The ultimate aim in the preservation of the red cell or of any living system is to maintain the energy-generating mechanism at a high level of efficiency.

* * *

Cancer

An interesting approach to cancer research was outlined by Dr. Irving Levi. While still very much in the experimental stage, the process involved the use of "metabolic antagonists" which block the nutrition of cancer cells by interferring with their supply of some essential growth nutrient such as amino acid or a vitamin.

Dr. Levi and his co-authors, A. E. Koller, G. Laflamme and J. W. R. Weed, research scientists with Charles E. Frosst & Co., Montreal have used a novel approach in that they synthesized a new kind of metabolic antagonist.

* * *

Formaldehyde

The determination of formaldehyde in air is one of the projects under study by the Ontario Dept. of Health. Formaldehyde, in the gaseous form, can be a source of odor, and eye irritation.

It originates from the incomplete combustion of organic materials, and is therefore found in the effluent from refuse-burning incinerators and heating units, and in automobile and diesel exhaust fumes.

Dr. A. C. Rayner, Toronto, described an accurate method for collecting and analyzing the formaldehyde content of urban air.

Because of the high sensitivity of the method we have been able to trace the concentration patterns through low as well as peak levels, and are finding evidence of daily periodic trends.

* * *

Peat

The proximate chemical composition of a number of sphagnum peat bogs in the Maritime provinces was described by D. G. Smith, Halifax. Mr. Smith is with the Atlantic Regional Laboratory of N.R.C. in Halifax.

This information on the nature of these materials is needed before any chemical development can take place.

Humic substances comprise the largest analytical fraction of this peat — in relation to bitumens, hemicelluloses, celluloses and lignins on the over-all average.

The concentration of these substances increased rapidly with depth.

Although the humic materials in soils, peats, and coals, have been investigated over the past 150 years, the starting materials, the nature of the humification processes, and the chemical constitution of the intermediate and end products are still indefinite.

* * *

Cod Fillets

Research to find out why cod fillets generally deteriorate faster in frozen storage than some other commercially important fish fillets was outlined by Dr. E. G. Bligh of the Fisheries Research Board, Technological Station, Halifax, N.S.

If the cause can be established, then remedial steps can be taken to prolong the storage life of frozen cod and similar species, which would prove invaluable to the industry.

The cod fishery of the Atlantic Coast is one of the largest. Its landed value amounts to about one third of the total fishery and of this, an increasing proportion is marketed frozen.

* * *

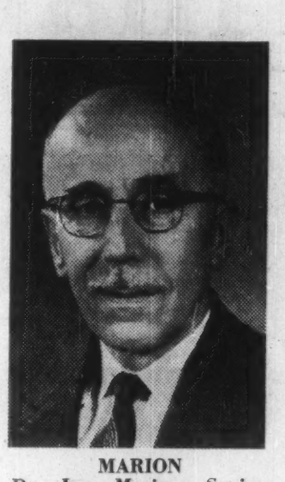
Breath Tests

Increasing use of breath tests in combatting the alcohol-traffic problem was predicted by Dr. B. B. Coldwell.

Statistics indicate that alcohol is involved in at least 50% of traffic accidents and traffic fatalities, Dr. Coldwell said. In addition, accidents are the highest killer of young people.

Breath tests are accurate and have certain advantages both for the driver and for the police.

In Canada, breath tests are used in Ontario and Saskatchewan, and in Vancouver.



MARION
Dr. Leo Marion, Senior Director, National Research Council, Ottawa, has been elected new vice-president of the Chemical Institute of Canada for 1960-61.

Award Winners

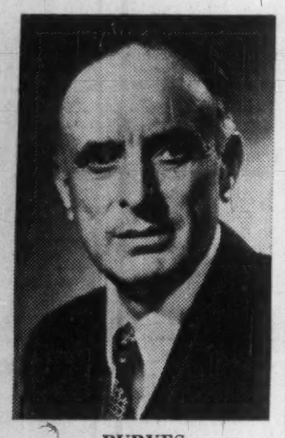
EDWARDS

Dr. Oliver Edward Edwards, well-known Canadian chemist who has made outstanding contributions in the chemistry of alkaloids, is the 1960 Merck Lecturer at the 43rd Canadian Chemical Conference of the Chemical Institute of Canada held this week in Ottawa.

Dr. Edwards is senior research officer with the Organic Chemistry Section, Division of Pure Chemistry, National Research Council, Ottawa.

His chemical work has been on the chemistry of alkaloids; in particular he has made outstanding contributions to the chemistry of lycoctonine, ajaconine, atisine, delpheline and other alkaloids.

The Merck Lecture was established in 1955 by **Merck & Co.**, Montreal and is designed to bring distinguished younger scientists to address a technical session of the C.I.C. annual conference.



PURVES

Dr. Clifford B. Purves received the C.I.C. Medal this week during the Chemical Institute of Canada's 43rd conference and exhibition at Ottawa.

Dr. Purves is E. B. Eddy Professor of Industrial and Cellulose Chemistry at McGill University, Montreal.

His research in lignin has earned him an international reputation. Lignin is a carbohydrate which makes up about one-quarter of the wood of trees. One of the serious problems of the pulp and paper industry is to find uses for lignin.

Dr. Purves has been successful in preparing a lignin from wood which maintains the characteristics of lignin as it occurs in the natural state. It is generally believed that Purves lignin is as close to naturally occurring lignin as can be obtained.

The importance of this research is that experiments can be carried out to obtain information regarding changes which take place during the cooking processes in pulp mills.

The medal has been given to Dr. Purves for his outstanding contributions to chemistry.

Fuels Grow In Quality

Modern fuel-consuming devices require higher and higher quality fuels from the oil refineries.

For example, fuels used in modern high performance jet aircraft often must withstand high temperatures for prolonged periods of time.

This situation never occurred in the older, propeller-driven aircraft.

Along with the trend to high quality fuels the oil industry has had to supply increasing volumes of light fuels and also to provide the raw materials to a rapidly growing petrochemical industry.

This has resulted in new cracking processes and higher severity of cracking both of which have increased the problems in maintaining high quality expected of modern fuels.

Dr. A. Oswald who presented a paper on modern fuel-consuming devices to the Canadian Chemical Conference meeting this week in Ottawa, is with the Pesticides Research Institute, Dept. of Agriculture, London, Ont.

Adhesive

An extract of western hemlock bark can be used to obtain spectacular results in cold-setting adhesives at low costs, the 14th annual meeting of the Forest Products Research Society was told recently at Montreal.

Dr. F. W. Herrick, a scientist from **Rayonier Inc.'s** Olympic research division at Shelton, Wash., reported that the chemical cellulose producer's relatively new silvichemical, HT-120, a unique and highly reactive polyphenolic intermediate, can be used successfully as a partial replacement for expensive resorcinal.

The report revealed that adhesives containing from 30% to 60% of the bark product on a solids basis gave excellent bonding quality in Douglas fir laminates prepared under room temperature setting conditions.

Foundation Researches Wood Lignin

Military tires built from synthetic rubber using lignin instead of carbon black as a reinforcing agent is one of the new research projects undertaken by the Ontario Research Foundation.

The work is being done for the Dept. of National Defence.

Other specialized work on wood lignin include:

- **Fractionation of waste sulphite liquor from the pulp and paper operation was studied.** A new method for removal of sugars was developed, based on the solubility in organic solvents of a tertiary amine salt of the ligninsulphonates. This may have commercial applications.
- **Continued research on the tanning properties of lignin has led to patents and publications in this field** as well as to work for industrial clients on lignin binder and on the recovery of ammonia from waste sulphite liquor. Both projects are approaching commercial exploitation.
- **Chemistry of vanillin and related compounds was further studied.** Acetovanillone was examined and several new compounds prepared.

The ammonia recovery process for ammonia-base, waste sulphite liquor developed in 1959 for the **J. G. Pritchard & Co.** was given pilot plant trials at **Fraser Companies Ltd.** for several months last year. The Foundation results were confirmed.

A full scale plant is being designed and detailed cost estimates prepared. If successful, this development may permit the sulphite process to match the versatility of the Kraft process.

The major project of the engineering and metallurgy department was a continuation of the jet smelting program, by means of a special grant from the Ontario Government.

A number of runs were made and magnetite successfully converted to molten iron. Several improvements in techniques were developed and more encouraging results obtained.

Adding carbon to the feed improved the condition of the molten bath considerably. By arrangement with the government, commercial sponsorship was sought towards the end of the year.

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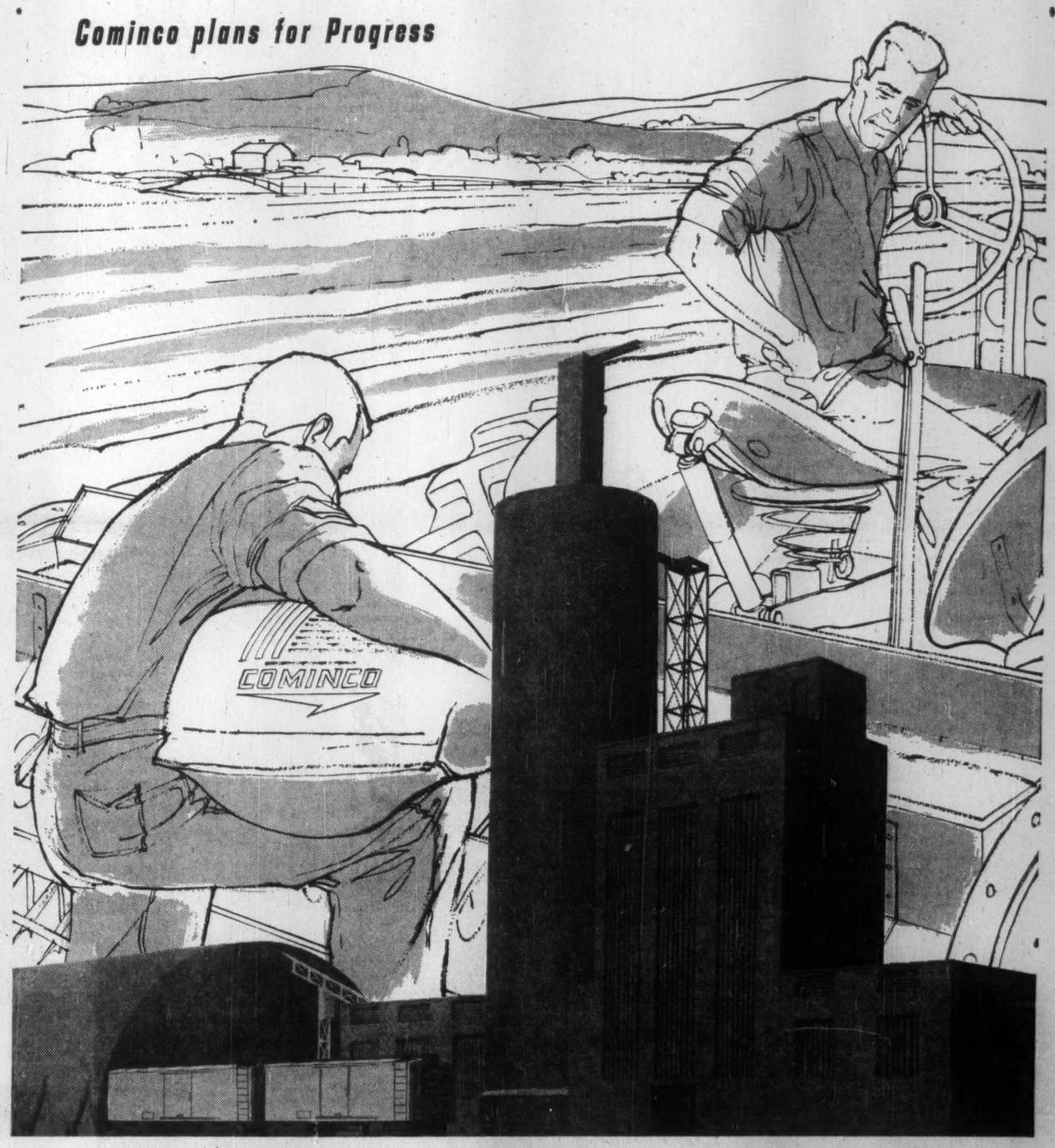
Cominco plans for Progress



U-R-E-A SPELLS GROWTH

By mid 1960 Cominco's new 5 million dollar plant in Calgary will be converting Alberta natural gas into urea. Urea is a chemical used chiefly as a fertilizer — one reason "U-R-E-A spells growth".

Urea will be a valuable addition to Cominco's wide range of chemical fertilizers, and thus the new Calgary Plant represents an important expansion for Cominco — another reason "U-R-E-A spells growth".

Urea is used as a fertilizer, an animal feed supplement and an ingredient in plastics manufacture and other chemical processes.

Cominco's plant is a "first" in Western Canada for this chemical. Initially the product will serve agricultural needs, but it stands ready to enter into industrial fields as the West diversifies and grows. Yes, in many ways "U-R-E-A" spells growth.

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How Chemical Industry Stands

	Plants	Employees	Salaries and wages	Cost of materials used	Gross selling value of products 1959	1958
			(000's of dollars)			
Coal Tar distillation	8	426	1,880	8,308	13,935	12,018
Heavy chemicals	57	10,371	52,472	126,941	299,184	260,968
Compressed gases	59	1,538	6,727	4,403	26,573	23,742
Fertilizers	46	3,034	13,820	52,524	94,388	89,146
Medicinals and pharmaceuticals	191	7,990	29,979	48,063	165,149	155,006
Paints and varnishes	133	6,272	26,281	71,409	146,598	143,097
Soaps and washing compounds	134	3,950	18,079	57,067	137,491	132,023
Toilet preparations	83	2,570	8,265	20,058	55,449	51,856
Inks	43	1,052	4,346	8,227	18,571	17,482
Vegetable oils	10	624	2,853	46,989	57,677	53,795
Adhesives	31	640	2,696	7,487	14,278	14,381
Polishes and dressings	43	848	3,476	10,966	24,783	24,508
Plastics (primary only)	35	3,526	17,429	57,059	103,501	97,802
Miscellaneous*	268	11,471	51,342	104,681	219,006	217,508
TOTAL	1,141	54,312	239,644	624,181	1,376,583	1,293,332

Outlook:

Maintain 1959 Record Pace

By W. L. DACK

Chemical industry management is watching all the key business indicators these days with almost fanatic attention.

Since they serve such a cross-section of industry they are affected — in varying degrees — by anything that happens to any part of it.

Their problem:

To sort out and correctly interpret the flood of mixed business signals flowing in from official statistical and customer sources.

In short:

The first half of 1960 has been pretty good for most chemical firms.

The industry has at least maintained — and probably slightly bettered—its pace of last year when a record $1.38 billion sales was established.

Profits have varied widely from company to company but will probably average out at about last year's rate.

But there's been some slowing down in business pace in recent weeks. Customers are taking an increasingly cautious buying attitude. At no time in the last 10 years have they been so price conscious.

In some cases the changed buying pattern has been beyond industry's control, has nothing to do with general business health — like the drastically reduced demand for chemical fertilizers because excessively wet weather has kept farmers off their fields; or the big drop in demand for a range of processing chemicals following the contract stretch-outs in the uranium industry.

But there are other developments the industry is watching more closely:

● **The drop in new housing starts** is affecting dozens of chemicals and plastics that go into hundreds of household applications, e.g. plastics kitchenware, appliance parts, plywood glues, surface coatings on furniture, metalware, inside and outside house surfaces.

● **The less-buoyant-than-anticipated** pace of new car sales — accentuated by the increasing import of foreign cars. This is slowing down one of the fastest expanding outlets for chemicals and plastics. Last year an average 20 lb. of plastics was used in every automobile manufactured on this continent.

● **At no time since end of World War II** has price competition — particularly from imports — been keener. Some of the prices quoted in recent weeks — polyethylene and vinyl sheet, for instance — have set domestic producers back on their heels.

What's causing concern is that this trend could become worse as surplus plant capacity in certain lines builds up even more around the world.

The industry isn't too optimistic about getting much help from the first major government tariff review in over 50 years, now getting under way in Ottawa. At any rate it will take three years to complete all the hearings and incorporate changes into a new tariff structure.

All in all, there's considerable uncertainty throughout the industry and some real soul-searching.

The dynamically growing chemical industry has at last paused to take inventory of its position—and it's pocketbook.

In the mood of buoyant optimism that's carried the industry along on its record spending spree, company after company has been ready to take on bold expansion projects.

It's been easy to adopt lenient attitudes on slow pay-backs on heavy capital investments. Actually, in the fast expansion race in which one company tried to outmanoeuvre another in new product manufacturing, competitors complained that some firms seemed to lose sight of the basic reason for being in business — to make a profit.

Now, almost overnight, the critical spotlight has swung hard onto earnings again. Executive meetings are echoing loud and long with talk of profit margins, rate-of-return on capital investment, new efficiency, and integration moves.

Particularly under fire are those expensive postwar plants still limping along at half capacity — or only kept busy through profitless pricing. Long hours are being given to critical study of how to get these units into the paying stages. Every level of organization, from customer service to top managerial executives, is involved.

And this invariably leads to the hot perennial argument of the chemical industry:

Since unit costs drop sharply with rising production levels, what should management do to boost production rates when either the home market is too small or has to be shared with imports?

Should prices be slashed drastically in an effort to knock out all imports — possibly gain some exports.

Sharp operational losses would have to be borne for a time by the entire chemical operation.

Or should management play it carefully and try to trim losses and await generally better marketing conditions?

The fact that some sections of the industry are still going along at a record clip this year reflects continued high demand for certain buoyant industry groups, e.g. pulp and paper manufacturing is a major user of chemicals; base metal refining — also a big consumer — is at least holding last year's level. Pesticides — a $25 million-a-year business — will likely record another increase this year.

Demand for certain workhorse chemicals that enter into dozens of industrial processes — sulphuric acid, ammonia, etc. — was still up over last year in latest DBS tabulations.

There has been a further general improvement in the petrochemical section of the industry this year reflecting still climbing demand for plastics and resins and some pick-up in overseas business.

Despite increasing product diversity and chemical plant expansion in a number of European countries and Japan, export volume in many cases is as good as last year and in several cases up substantially.

Canadian Chemical Co., from its huge petrochemical plant complex at Edmonton, — based on low-cost hydrocarbon raw materials — is competing successfully almost all over the world in several products — particularly its big volume, pentaerythritol. In a program designed to push cost advantages further and keep ahead of potential markets, company has a further $4 million expansion program under way that will boost basic chemicals capacity by 40%.

B.A-Shawinigan, enjoying brisk domestic and export markets for its phenol, is boosting capacity a further 20% at its Montreal East plant.

Shell Oil Co. of Canada is experiencing active domestic and export demand for its isopropyl alcohol.

Imperial Oil, from its spreading Sarnia petrochemical works, is producing more and more ethylene, is enjoying some export demand for its detergent alkylates.

Despite keen competition in its all-important overseas markets Canada's big Crown-owned synthetic rubber producer — **Polymer Corp.** — is operating at capacity and exporting some 70% of its total production.

Both producers of the conventional type polyethylene — **Canadian Industries Ltd.** and **Union Carbide Canada** — are able to operate at a high capacity rate of their continually expanding plants. Although not too profitable, available export helps to take up any domestic demand sags.

Canadian consumption will jump a further 20-25% this year, marketing experts claim. If the big market break-through comes in use of polyethylene film for bread overwrap then a new growth cycle starts.

Because the new high density type polyethylene has excellent permeability resistance to a broad range of materials and can be readily fashioned into containers by blow - molding techniques, huge markets are open for it in packaging, e.g. plastics bottles for synthetic detergents.

Dow Chemical of Canada has just brought in the first plant unit in this country to make this type of polyethylene. **Du Pont of Canada** will soon follow with production from its new Sarnia plant.

To get an even bigger share of the fast developing plastics market several of the major materials producers—C-I-L, Dow Chemical, Canadian Chemical and Union Carbide Canada — have all announced vertical integration moves.

Each has either purchased outright, or gained control of, important molding and/or converting firms. With each of these moves go plans for greater capital expenditure in this secondary end of the business.

Although there has been some moderate slow-down in pace of capital expenditure it is still carrying along at a high level.

Ottawa's capital investment forecast places industry expenditures this year on new plant and equipment at $120 million. That's about 60% higher than last year.

In the last 10 years the industry has spent over $1,000 million and in the same period sales volume has tripled.

Over $400 million of this has been spent on establishment of a broadly based petrochemical industry that today can provide the range of raw materials for dozens of new made - in - Canada products.

Despite the current accent on improving competitive positions company development departments are working as actively as ever on new product studies. Every firm has a number of these on its planning books and looks at them periodically in the light of market growth patterns. New ones are added every year.

Actually, chemical leaders must look further down the planning road than the rest of industry since theirs are the raw materials and processing catalysts for all industry.

To be able to meet expanded and changing requirements from customers in 1962 and 1963 means making bold new plant commitments now.

It means trying to gauge the market potential several years hence of exciting new products in the test-tube and pilot plant stages now. There is a broad range of these coming along, many of them in the plastics and synthetic fibres fields.

One new product and plant development is virtually certain. Some company is going to jump into production of that exciting new plastic — polypropylene — before long. No less than four major companies are currently watching its market progress.

They would all probably prefer to wait another year for further market growth before taking the high-cost move. But betting is that one of the companies will jump the gun before that.

One or more oil refiners are almost certain to go into benzene production soon. There is currently a supply shortage in this country with imports assuming sizeable quantities.

New Rival for Polyethylene

The hottest topics in the plastics industry today are high density polyethylene—being offered for the first time by a Canadian manufacturer—and the big new contender for public fancy—polypropylene.

How are the two going to fight it out in the marketplace?

How long before a Canadian chemical company announces plans to manufacture polypropylene?

For plastics officials there is no longer any shadow of a doubt that polypropylene is the next big luminary on the plastics horizon.

U. S. industry authorities hail it as the third potential billion-pound-a-year plastic (after polyethylene and vinyl).

Its impressive list of properties coupled with its relatively low price assures a dynamic growth pattern that could rival that of polyethylene.

Here are just a few of the reasons why industry people see its sales pattern booming over the next few years:

● **It is the first popularly priced** plastic material to break through the 212 - deg. heat barrier. High density polyethylene got close to it. This opens up a whole range of new market possibilities for plastics.

● **It is the lightest of all plastics.** Not only does this mean more material per lb. but lower density results in weight saving to the consumer, important in such applications as luggage, vacuum cleaner attachments, etc. This is accompanied by high strength.

● **It has excellent environmental crack resistance.**

● **Has excellent chemical resistance.**

Even the first producers—just into production over recent months in Italy and U. S.—haven't much more than scratched the surface of its potential. The field of application is virtually wide open yet.

Four firms in this country are watching its progress with more than passing interest — **Canadian Industries Ltd., Dow Chemical of Canada, Du Pont of Canada** and **Union Carbide Canada.**

First manufacturing move is likely to come from one of these. But if marketing develops as anticipated at least one and possibly two of the others could jump into it in time.

One of the biggest applications is going to be in filaments and fibres. These in turn could appear in hundreds of end products—from marine ropes to men's suits.

A major U. S. oil company which operates its own fleet of sea tankers has just recently replaced all its ships' ropes with polypropylene rope.

The rope is exceptionally strong, has good abrasion resistance, resistance to rot and floats. What's more, one man can handle twice the amount of rope he could in the case of conventional rope material.

The fibre is becoming more and more promising as a new textile material.

It can be spun, crimped and textured to be used for knitted, woven or nonwoven fabrics as well as in blends with natural, or synthetic, fibres. Problems of dyeability are being overcome.

The automobile manufacturing industry is studying a number of applications in upholstery.

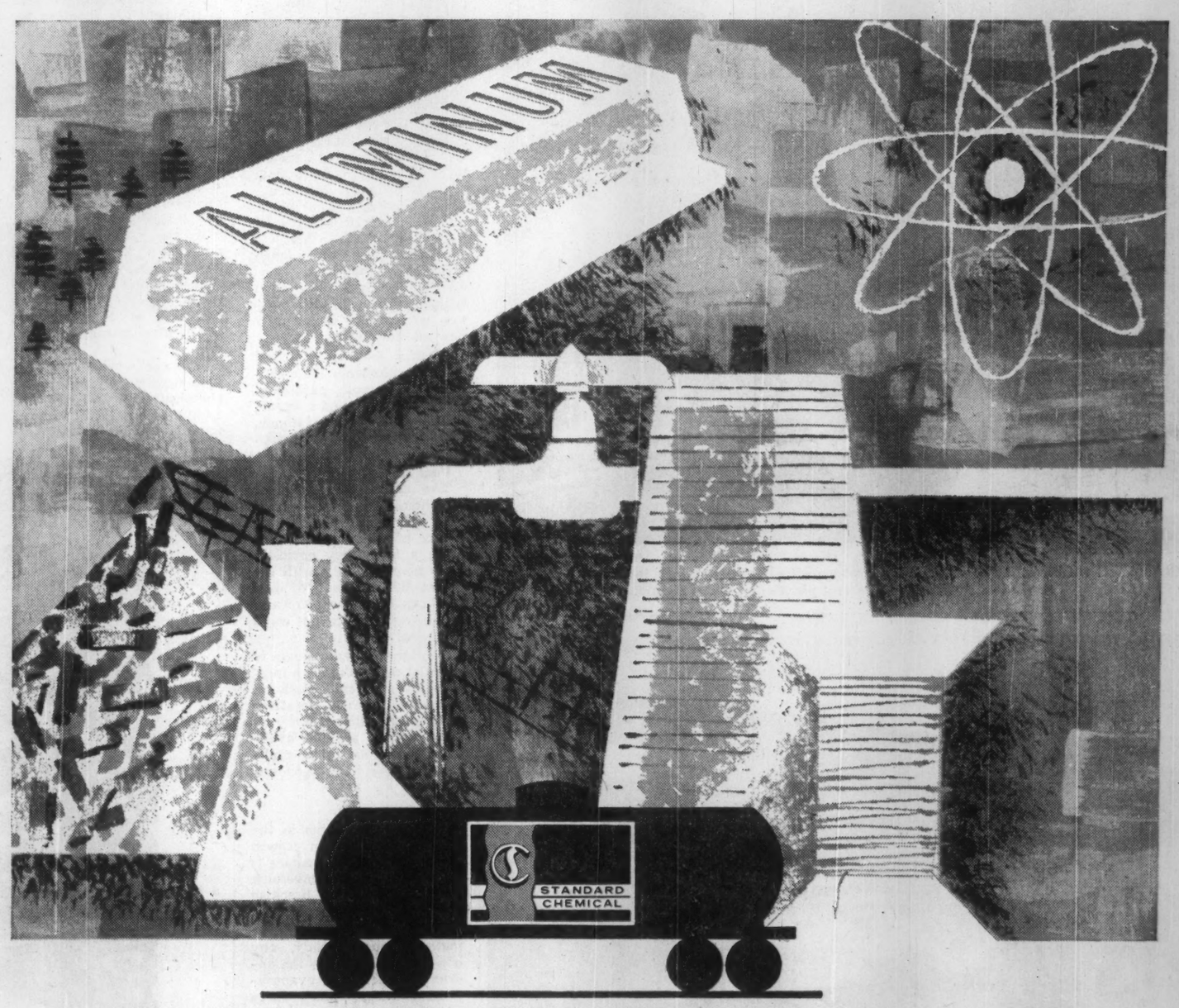
Many of the big packaging markets may fall to polypropylene. One of its major advantages here over other plastics materials is its excellent machineability.

It is stiff enough to be handled on high speed packaging equipment.

Other excellent properties in this application are high transparency, good dimensional stability, sparkle and toughness. Overwraps for textiles, moisture barriers for tobacco wraps, cigarette packages and chewing gum and bread wraps are good possibilities.

Up to now the largest volume of polypropylene used commercially has been in injection molding. It is easily molded into durable, low cost parts having a colorful, glossy surface finish.

It has a combination of physical and chemical properties which should complement and extend the blow molding markets opened up by polyethylene.



where chemistry plays a major role

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Chemicals Shaping Future

What new chemical development, now in the test-tube or pilot plant stages, promises to have the greatest impact on Canadians over the next 10 to 20 years?

Although the opinions of chemical engineers and research experts differ considerably on this question they almost all agree that the following developments will be among the most important for the future.

Acceleration and control of animal and vegetable growth.

Population of the world is said increasing at the rate of 100,000 people per day. Because of this "population explosion", countries of the world will be hard-pressed to provide food for the additional people.

They will not only have to produce more food from less area, but they also will have to open up areas hitherto thought uninhabitable, e.g. the Canadian north country.

Science is coming up with answers to these problems. Materials are being developed to produce more product and less waste.

In addition to the development of new plant species, chemicals are being found that will accelerate the growing period of plant life so that full crops can be grown during a relatively short growing period.

Possibly of greater potential importance are those compounds that control the life process increasing the yield of edible and reducing the nonfood portion of the plant.

* * *

Polyolefins.

This whole petrochemical field is opening up very rapidly as man learns to control more closely the molecular structure of his new products.

There will be broader application, for instance, of polyethylene as the technology of its use develops, e.g. in blow-molding techniques.

A marked expansion in production of the exciting new plastic, polypropylene, can be expected.

This is the first popularly priced plastic that will break the 212-deg. F. heat barrier.

Its application in the textile filament field is bound to be big.

Polybutene will soon join this group of new plastics for use in production of plastic pipe and films. Polyisoprene and poly-cis butadiene will become large volume products competing with natural rubber.

* * *

Developments in the metals field.

The nuclear energy program, the electronics industry, the missile and aircraft industry and other fields have created interest in use of the rare metals, e.g. beryllium, bismuth, boron, cadmium, cobalt, columbium, gallium, germanium, hafnium, endium, lithium, rhenium, uranium, thorium, tungsten.

Most of these have been available in laboratory quantities only in the past but demand has improved production methods very considerably. The major interest for military uses is in metals to hold strength at temperatures from 2,000 to 4,000 deg. F. Also a prime target is higher strength for weight ratios in many material research projects.

* * *

Plastics in Construction.

Tremendously increased markets for plastics are seen in construction industry.

Foamed plastics for insulation, plastic sheating for curtain wall construction, reinforced resins for structural purposes and for pipes, and resin for chip board spell greater inroads into markets formerly held by other long-established materials. Success in developing new high temperature resistance plastics will result in entirely new market outlets.

Plastics technology based on other elements than carbon, for example, phosphorous, silicon, and boron, though still in its infancy, gives great promise already.

* * *

Fuel cells.

The direct conversion of the chemical energy of gases into electricity — long a dream of scientists and for years a laboratory curiosity — is now a reality with the recent development of fuel cells capable of economically producing thousands of watts of power.

The inherent advantages of the fuel cell make it an ideal source of silent electrical power in remote locations where conventional fuels or water power are not available. Numerous other applications have been proposed.

* * *

Saline research.

To open more area in the world for population growth and industrial use, science is working toward conversion of both saline and brackish water to a potable form.

Presently there are three methods under study, any one of which may be the answer—by heat and evaporation, chemically, and electrochemically.

The next 10 years should see introduction of plants for conversion of sea and brackish water to fresh water in areas where fresh water supplies are limited. In time if the cost of nuclear or solar energy can be reduced sufficiently this could make irrigation of many semi-arid areas of the world feasible.

* * *

Non-woven fabrics.

Disposable clothing is just around the corner. Development of non-woven fabrics is almost complete. These materials will be formed from fibres in loose form pressed together with or without a binder and with or without heat.

* * *

Automatic control.

There's a strong trend toward automatic control in chemical plants. This has been made possible by the development of such rapid analytical tools as the gas chromatograph.

Output of these instruments will be fed into computers, made reliable by the introduction of the transistor, and the results will be used to make corrections in plant operation through feedback circuits. Ten years from now many plants will be completely automatic.

DRAMATIC SILHOUETTE of Canada's fast-growing petrochemical industry. Here is section of Polymer Corp's vast plant complex at Sarnia.

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Unions Shooting For Pay Boosts

Chemical industry wage costs are mounting steadily.

And the two leading unions in the field are shooting for larger pay packets for their members in 1960.

- **Average weekly wage in chemicals advanced about 3%** in the past year to February, DBS figures show.

For the industry as a whole, the weekly average is $78.39.

- **Since 1955, the advance in the average, from $62.49 to $78.39,** has been around 25%.

In the same period, the average work week declined from 41.3 hr. to 40.4 hr.

- **The recent average compares with $71.50 for manufacturing as a whole** and $77.97 for construction industry.

Average weekly pay figures vary widely within the chemical field: All the way from a recent $57.97 in medicinal and pharmaceuticals to $91.65 for workers in acids, alkalis and salt industries.

Fertilizer and paint-varnish workers earn an average of $81.17 and $72.45 respectively.

Dominant unions in the field are the Oil, Chemical & Atomic Workers International Union and the International Chemical Workers Union.

OCAW has some 40 locals in Canada and a membership of around 11,000.

Its strength is fairly evenly distributed in six provinces from Quebec to the west coast, but is spread between chemicals and oil and gas fields.

The ICWU has 89 locals and 13,750 members — at latest Labor Department count — but strength is concentrated in Ontario and Quebec.

Wage packages in recently-negotiated agreements have been running from 5c hr. increases and up, over one year, plus fringes.

Some settlements:

- **Gain of around 8.5c hr. at National Drug Chemical,** plus changes in vacations and sick benefits.
- **Wage changes of 8c for this year and 6c hr. next** in settlement at **Merck & Co.,** while an increase of 8c over one year was made at **Tamblyn Drug Co.**
- **There were increases of 5c to 8c hr. reported in agreement** between OCAW and **Northwest Nitro Chemicals** in Alberta.

Right now, OCAW is negotiating with **Polymer Corp.,** the crown-owned synthetic rubber maker at Sarnia, Ont.

Still in the early stages, the talks are going ahead quietly.

But the situation does have some explosive elements.

Polymer is faced with hotly competitive world market for its production of rubber.

Costs — labor costs — are big factors in this fight for markets.

Last year, an increase-hungry union struck the Polymer plant for 98 days before settlement was reached on a one-year agreement.

It gave Polymer workers an average of 9c hr. hike across the board — although union had originally demanded a 10% increase equal to around 22c hr.

This year, also, contract talks between OCAW and Dow Chemical will come up again. A two-year agreement expires in the fall.

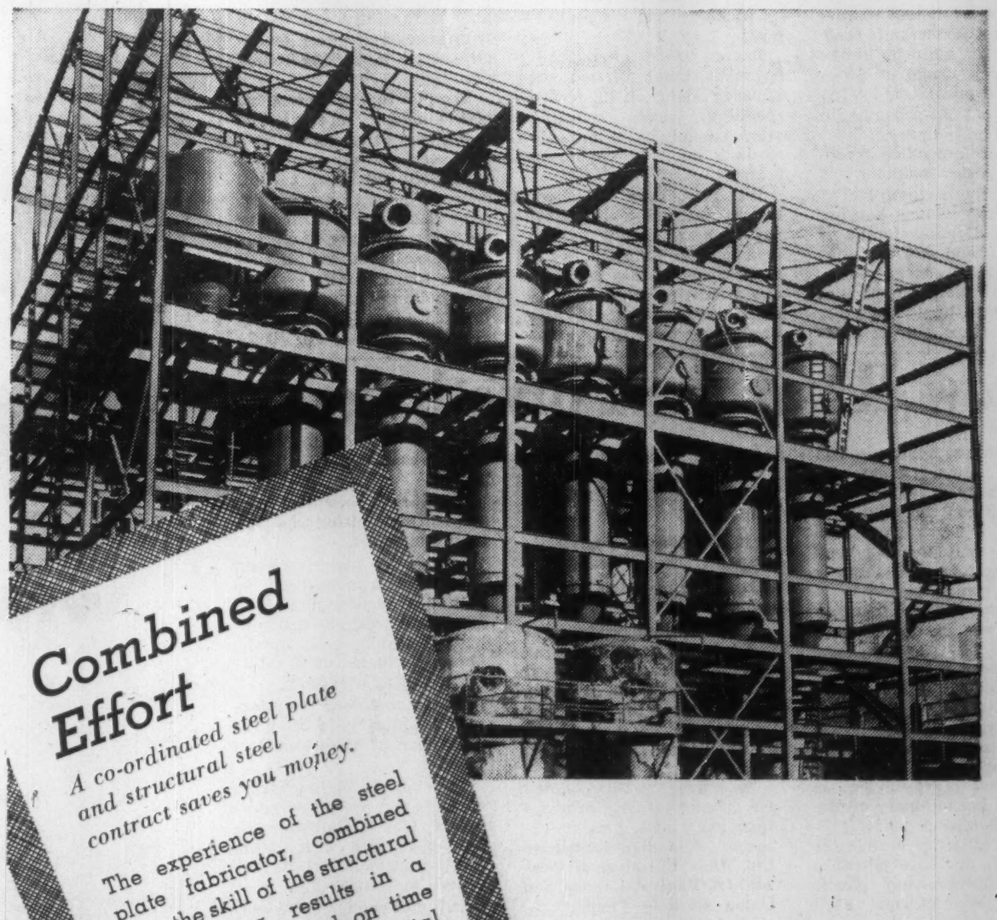
Generally, agreements in the industry are for one or two year periods.

Hints at possible future merger talks continue in chemical union circles, but officially nothing is under way.

The OCAW and ICWU did have negotiations on an international level designed to explore merger of the two unions but they got nowhere.

Average Earnings

	Av. Hours Weekly	Av. Weekly Wages $
1955 average	41.3	62.49
1958 average	40.7	73.93
1959 average	40.8	76.58
Feb. 1959	40.7	76.08
Feb. 1960	10.4	78.39



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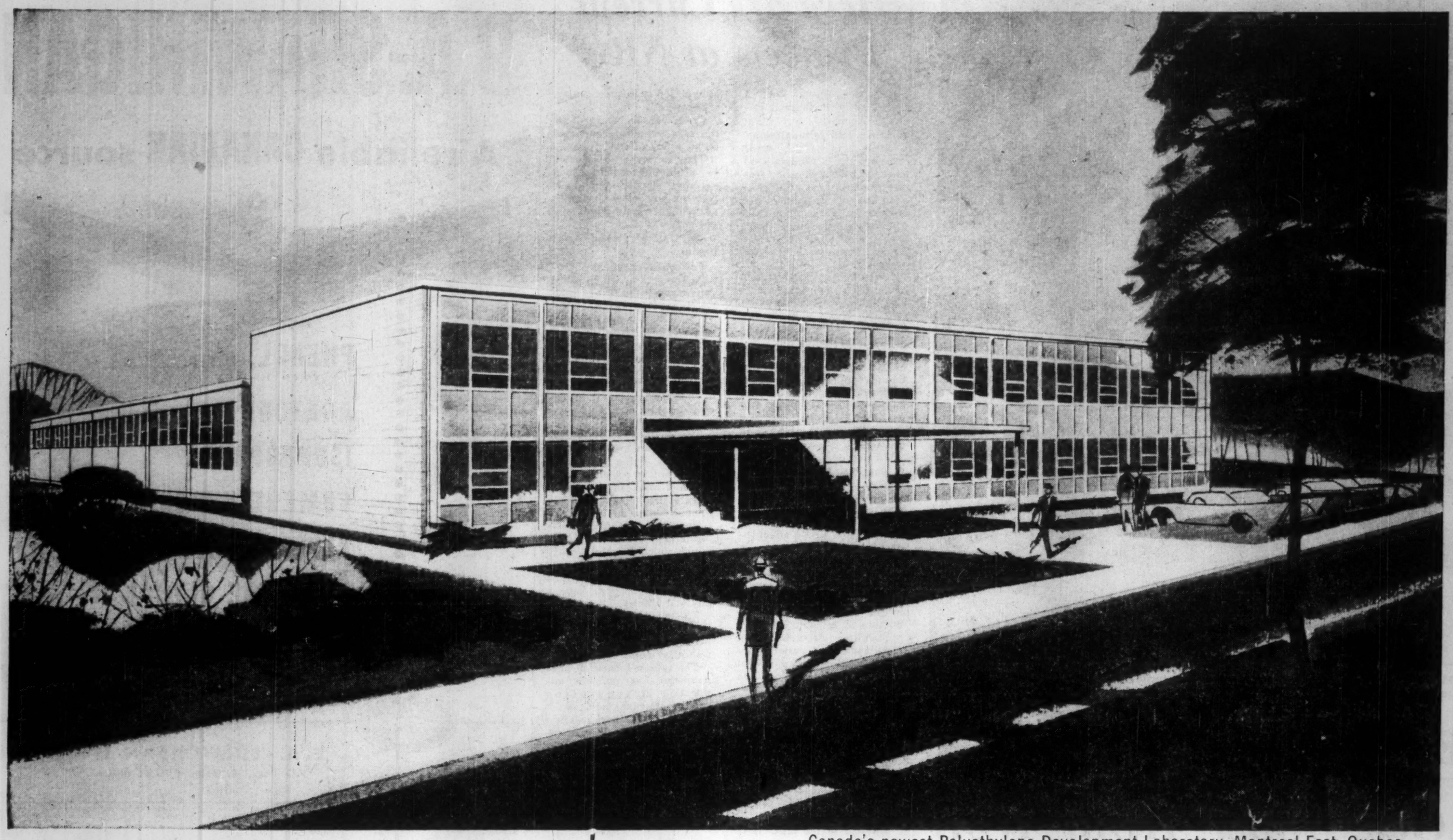

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AMMONIUM NITRATE, well-known fertilizer material, now invades the explosives field. Here helper mixes diesel oil with ammonium nitrate in bag prior to pouring it into drill holes. Can also be mixed right in the drill hole.

Explosives

Get Boost from Iron

Explosives demand has been holding at a fair level despite completion of several major construction projects like the St. Lawrence Seaway and big-inch gas pipelines and a slower than normal development pace in mining and oil work.

Brightest light at the moment is the quickening development program in iron ore mining in Quebec and Labrador.

Huge projects like that of **Iron Ore Co. of Canada** at Carol Lake, Labrador, **Wabush Iron Co.** at Wabush Lake, Labrador and **U. S. Steel Co.**'s Cartier Mining project in Quebec will require huge tonnages of explosives in general construction and open pit work over the next several years.

The explosives demand means a continuing heavy requirement of a number of key chemical raw materials like nitric acid, glycerin, glycol, ammonium nitrate.

Ammonium nitrate—one of the biggest items in the fertilizer trade — is now finding a fast-expanding outlet in explosives in this country.

Sodium nitrate is one of the few chemicals that still has to be imported.

Substantial quantities of sulphuric acid are going into explosives processing steps.

The development of ammonium nitrate as a blasting material in large open pit mining and quarrying operations is still exerting a major impact on the industry. This new product is making increasing inroads into use of the older, higher-priced explosives.

While the ammonium nitrate is more economic than other explosives and blasting agents, its prime drawback is that it must be used in dry holes since it is highly soluble in water and is rendered inactive when wet.

But considerable research into this limitation is producing promising new modifications that overcome some of these weaknesses.

For instance **Canadian Industries Ltd.'s** research has come up with a slurry explosive which resembles pea soup and is unaffected by water. It is encased in polyethylene bags. It is comprised mainly of ammonium nitrate, T.N.T. and water.

The presence of water is said to actually help the detonation reaction by increasing the gas volume and pressure. Iron Ore Co. of Canada co-operated with C-I-L in the development work.

Other explosives and chemical supply firms are carrying on their own research programs. **Du Pont of Canada Ltd.** has come up with its own slurry product using ammonium nitrate, T.N.T. and various additives.

But ammonium nitrate is still being widely used in dry applications in big open pit and quarrying operations.

This blasting agent is simply ammonium nitrate mixed with ordinary fuel oil and set off by a primer stick of high explosives.

The big advantage is that the blasting agent can be mixed right on the job, right in the boreholes. Then again there isn't the need for the extensive safety precautions associated with handling conventional type explosives.

The technological progress in the new explosives concept is increasing the demand for ammonia. But with the sharply stepped-up productive capacity for this workhorse chemical in eastern Canada there is no chance of any shortage developing over the foreseeable future.

C-I-L's big new ammonia plant at Millhaven (200 tons daily capacity) is operating smoothly. **Cyanamid of Canada** is expanding capacity at **Welland, Ont.** and **Brockville Chemicals** is soon to start construction of a big ammonia plant at Maitland, Ont.

Explosives production in Canada is running well over 100 million lb. a year rate. An additional 20 million lb. or so are required in blasting agents.

One authority estimates that some 180 million lb. of chemicals are going into manufacture of explosives in each year. The greatest proportion of these are being supplied by Canadian chemical producers.

Du Pont Co. of Canada is spending some $500,000 on a plant expansion program at its North Bay explosives works. This project is expected to be completed within a month or two.

Canadian Industries Ltd. has completed construction of Canada's first plant to make PETN (pentaerythritol tetranitrate) at its Beloeil Works, Beloeil, Que.

Most of the output from the new plant will be used in manufacture of blasting accessories for which there has been a rapid market increase during recent years. Cost of plant was estimated at $500,000.

In mid-January of this year the two explosives manufacturing firms in this country boosted price of all high explosives. Average price increase worked out close to 5%. Increased cost of raw materials was said main factor behind advance.

Mr. President!

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Here are Current Projects at NRC

Here are typical current projects of the National Research Council:

• **Citric acid fermentation.**

Citric acid is not made commercially in Canada — at least not by the primary fermentation process. But consumption of this important product is rising steeply as population increases and with the growing per capita use of beverages and medicinals.

Canadian sugar companies have been exporting raw beet molasses — chief source of citric acid — while the Canadian supply of citric acid is still imported.

Little, if any, work has been done by industry in Canada on methods of producing citric acid from our domestic beet molasses. But the NRC over the past few years has been establishing the technical essentials of a "submerged fermentation" process, using Canadian beet molasses.

In 1956 an NRC process was patented, and since then several variables have been tested which would affect industrial production.

With the larger facilities of the Rideau Falls Laboratory, two additional problems are being investigated: stability in the fermentation and reduction of aeration costs.

Stability depends upon close control of various factors including the amount of potassium ferrocyanide used in the fermentation.

This chemical is needed to precipitate the heavy metals but harmful to the fermenting mold if maintained at too high a concentration.

Reducing aeration costs is largely a matter of recirculating the oxygen which is supplied in pure form to support the fermentation.

Interest in the NRC work has been active.

A Swedish company has adopted the process and scaled it up for industrial use.

One big question of general interest is whether this or any other submerged fermentation process can be adapted to the cane sugar type of molasses which is in easy supply from the West Indies.

The NRC has done a limited amount of preliminary work on this problem.

An important aid to submerged fermentation was developed recently at the Prairie Regional Laboratory at Saskatoon.

This is a foam-breaker based on a mechanical principle rather than on chemical action.

One of the big problems in commercial fermentation is excessive foaming.

Though chemical inhibitors are used, these often lower the efficiency of the process.

The PRL foam-breaker is simple and effective without reducing the absorption of oxygen by the fermentation.

• **Thawing indicator.**

A problem with frozen foods is to be certain that they have not been accidentally thawed and refrozen.

Many attempts have been made to develop a thawing indicator which is both cheap and reliable.

The NRC has one.

It is a card which can be packed with or inserted on the outside of the produce. The card turns red when too much heat, either over a long period or in short bursts, is absorbed.

Cards can be adapted for the safe temperature ranges of all kinds of foodstuffs.

They can even be adjusted to antibiotic medicines and vaccines, usually kept above freezing but below 40 deg. F; or to higher temperatures if desired.

• **Separating solids and liquids.**

For many chemical operations the rate at which solids can be separated from liquids means profit or loss.

The NRC has done pioneer work on "inclined settlers" which are many times faster than the vertical types in use.

New work is also being done on an improved method of flocculation used to recover solid materials suspended in a liquid.

The agglomeration process causes the material to collect in spheres, giving faster sedimentation, a more dense form of solid cake and in many cases easier subsequent handling.

Requirements for sphere formation are: a second liquid which is only slightly soluble in the suspending medium; and one for which the suspended solids have a physical affinity.

The solid particles, "wetted" by the additive, are held together by surface tension after pellet formation.

The sphere-formation phenomenon has possible application in separating multi-component solids or for various operations where granulation of solids is required. The same principle may also be used for breaking emulsions.

• **A new polymer.**

For the first time a high-melting-point polymer of isopropenylacetate, has been produced.

This polymer, synthesized at the NRC under a pressure of 6,000 atmospheres, is stable.

Frequently substances made under high pressure revert to their original forms when the pressure is removed.

This is true of certain polymers. Under normal conditions they become monomers in a few days' time.

A valuable exception is polyethylene, which was first produced under high pres-

(Continued on page 58)

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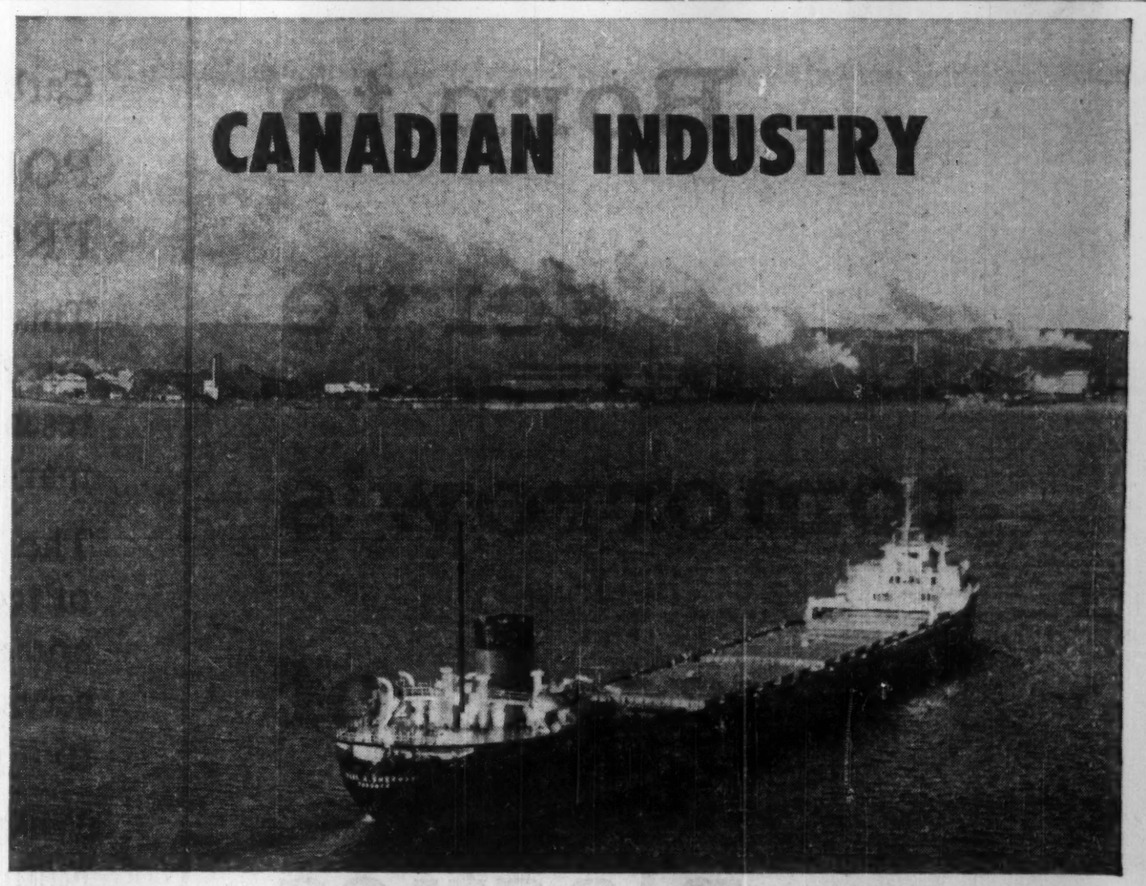

View of Hamilton's industrial heart from the new Burlington Skyway Bridge.
Photo courtesy of Dominion Foundries and Steel, Limited, Hamilton, Canada.

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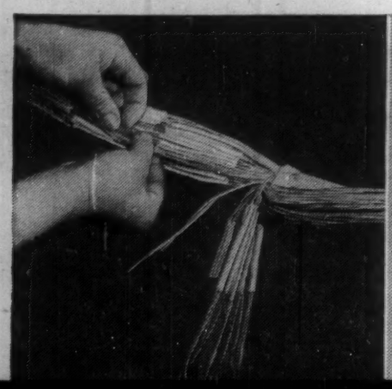

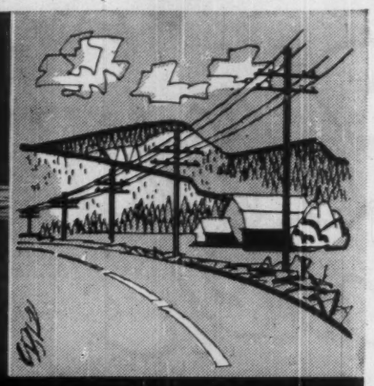

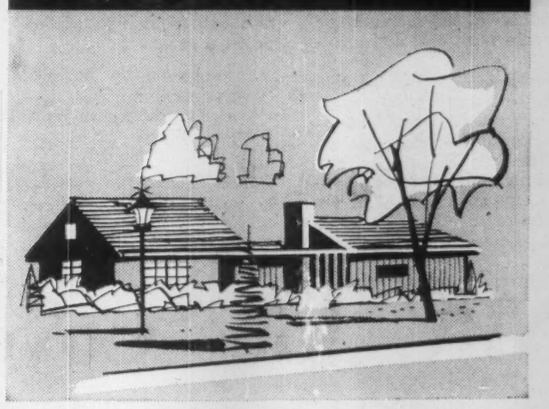

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CANADIAN RESINS DIVISION

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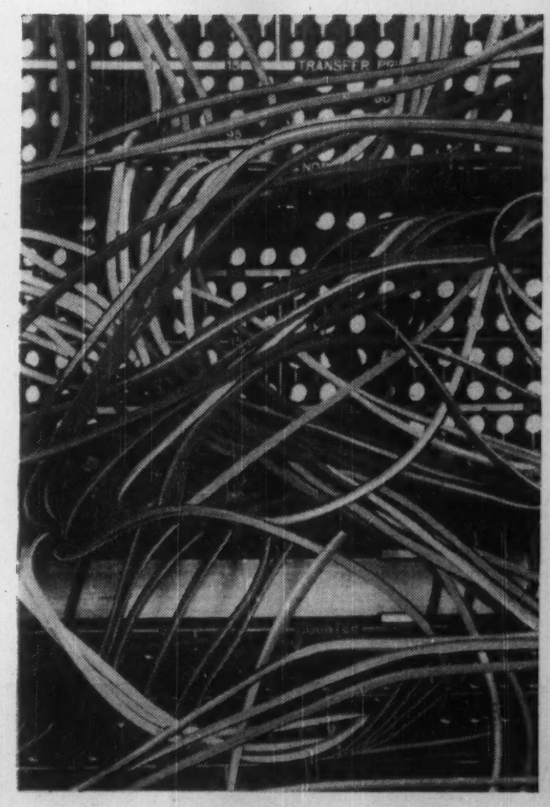
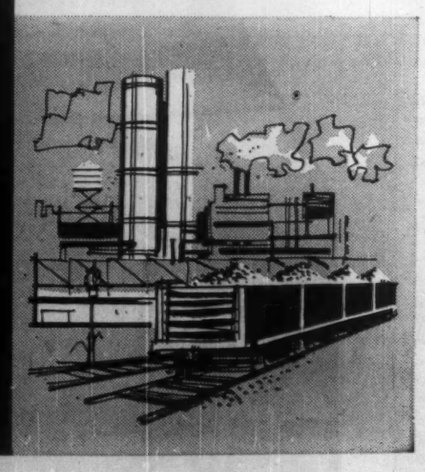
For example: Raw materials for non-corrosive rigid piping and extruded sections indispensable to industry; vinyl coated fabrics for colourful decorative styling in upholstery, wall coverings and apparel; resins and compounds for floor tiles that are durably beautiful and recordings with permanent high fidelity; protective and insulating sheathing for cables and intricate colour-coded wiring in precise electronic equipment.

1,001 products of industrial and consumer use owe their development and production to raw materials from Canadian Resins Division of Shawinigan Chemicals Limited.





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FOAMED POLYSTYRENE board made by Dow Chemical of Canada for a mammoth cold storage warehouse being built at Chilliwack, B.C. The plastic boards are used as a low temperature insulation on floor, walls and ceiling.

Benzene

World Demand Heavy

The chemical in shortest supply in Canada today is benzene — one of the by-products of the manufacture of coke from coal and refining of crude oil.

Demand is sufficient that two or three oil companies are considering building facilities to make the chemical.

The only oil firm in Canada now manufacturing benzene — about three million gallon a year — is **Canadian Oil Companies** at Sarnia, Ont.

The major benzene producers in Canada are the coke manufacturers. They turn out about nine million gallon a year.

Consumption in Canada, however, is 20 million gallon a year, the difference being supplied largely by imports from U. S. oil firms.

Heavy demand for benzene — now world-wide — is one of the first major symptoms of the spread of American standards of living, says E. A. Taylor, assistant general manager of the **Steel Co. of Canada,** Hamilton, the nation's biggest single producer of coal chemicals.

It's used in the manufacture of:

- **Synthetic rubber. (Polymer Corp.,** Sarnia, is a big customer.)
- **Plastic resins.**
- **Synthetic fibres,** such as nylon.
- **Synthetic detergents.**

Canadian benzene price is governed by the U. S. price and a tiny tariff of 1/3¢ gallon on the petroleum product. The U. S. price in turn has been influenced by substantial imports from the U.S.S.R. and other European countries.

The Canadian coke chemical industry — which sells about $12 million in products a year — is not so pleased with the market picture for other products of its coke ovens. These are toluene, xylene, naphthalene, ammonium sulphate and tar.

▸ **Toluene, xylene and benzene** are the aromatic oils derived from coke-oven light oil. Trade synonyms for the chemical trio are benzol, toluol and xylol.

Stelco refines some six million gallon yearly of the three from light oils it produces in its own ovens, or purchases from other firms with coke-ovens or from coal-tar distillers.

Because there is a surplus of toluene and xylene, chemists are working overtime to find an economical way to turn these cheaper chemicals into benzene or put them to the same uses as benzene.

Major consumer of the two chemicals in Canada is the paint and varnish industry. Toluene is also used as an octane booster for gasoline, and in the manufacture of dyestuffs and explosives. Xylene is used by makers of insecticides.

▸ **Naphthalene,** familiar for its use in mothballs, is a minor product of the coke ovens. Stelco makes only six carloads a year.

About 2.7 million gallon a year of toluol, xylol and naphthalene are produced in Canada.

▸ **Ammonium sulphate,** used largely for fertilizer, is sold by the coke industry at a loss, since it must be disposed of. It competes with many other products with a

(Continued on page 59)

NRC Jobs Cover Wide Range

(CONTINUED FROM P. 56)

sure but which afterwards remained stable.

The great industrial promise of polyethylene soon led to cheaper low-pressure methods of production.

Similar developments could be expected with other polymers having sufficiently attractive properties.

- **Finely divided solids.**

Finely divided silica is being used in ever-increasing commercial quantities chiefly as a thickener for inks, paints and lubricants.

At the NRC silica is being prepared by a new chemical process which promises to be cheaper than other methods in use.

Another NRC development:

A lubricant which has unusual tenacity under heat.

The lubricant will burn before it drips. The process involves oxidizing paraffin wax in the presence of sodium.

Instead of melting under heat to a watery consistency, the wax softens to a heavy grease.

One obvious use: for wire rope used on hot jobs.

- **Spouted beds used for grains.**

Coarse grains by the carload are being dried by a "spouted bed" technique.

This is the first commercial use of a process developed by NRC's applied chemistry division at Ottawa.

The equipment, which is being used commercially in the West, applies jets of hot dry air to deep beds of the grain. The air is applied from beneath, forces itself up and moves the grain in a regular convection-like pattern.

This has advantages over other methods of drying.

It is continuous and automatic, and the drying is steady and uniform.

The spouted bed has also been adapted by the NRC for drying wheat and for a number of chemical reactions.

- **NRC development adopted in the U. S.**

A chemical rain-repellent for windshields, patented and licensed by the NRC, is now in extensive use in the U. S.

The repellent works best under heavy rain or at high speeds.

It was designed for use with aircraft. Wet windshields may be one cause of fatal accidents on landing or in mountainous areas, since the impaired vision caused by the water can mask the position of a runway or an obstruction.

- **Canadian wood compounds.**

A study with long-term interest to the pulp and paper industry is the continuing investigation at the NRC of a class of wood compounds known as "hemicelluloses".

These compounds are related to cellulose. They form part of the cell walls of plants.

They make up 25% of wood, but neither their function in the tree nor their effect, if any, in pulp and paper manufacture is known. The practical aspects of the hemicelluloses are not considered in the NRC work.

Rather the aim is to accumulate more basic information on these molecules which in their structure are tremendously complex.

What is their composition and how are they put together?

Until such questions are answered by basic research the function of one of the main constituents of plants will remain unknown.

One aspect of the NRC investigations has recently been of special interest here and abroad.

This is the application of gas liquid phase chromatography to these types of carbohydrates enabling a more thorough and accurate analysis of their chemical structure.

- **Other long-term studies.**

Most of the work in applied chemistry at the NRC is of a kind not generally undertaken by private companies in Canada but which is of long-term interest to Canadian industries.

Examples: work in corrosion, rubber, metallurgical chemistry, and certain chemical reactions which have widespread application in manufacturing.

Work of this kind at the Prairie Regional Laboratory includes the extraction of protein from Canadian wheat, development of continuous fermentation processes, improvement of vegetable oil processing, and animal feed improvement.

At the Halifax laboratory one of the most interesting studies is in steelmaking, at least in some of the chemical aspects of the steelmaking process. There are problems in the use of Newfoundland ore and Nova Scotia coal which are basically chemical.

- **Pure research.**

Pure researches — investigations which have no practical use — are conducted mainly in chemistry, physics and biology.

In the division of pure chemistry 13 groups or sections are studying fundamental properties of matter, work which only in its broadest sense is comprehensible to the layman.

Notable is the investigation of alkaloids.

These are groups of organic compounds many of which have strong effects on humans, used for example as medicines, narcotics and poisons, but whose functions in the plants which produce them are little understood.

Pure chemistry deals with such other areas as organic synthesis, organic spectrochemistry, photochemistry, nuclear magnetic resonance, mass spectrometry, surface chemistry, and thermochemistry.

In biophysics and biochemistry primary substances of the living cell are being investigated.

Small groups of workers at the NRC are adding their findings to those of hundreds all over the world who are delving into the basic mechanism of life.

The work at the NRC is very specialized, limited to a few constituents of the cells of living matter.

At a broader level NRC scientists are investigating photosynthesis in plants, studying the chlorophyll molecule by the use of gas liquid chromatography.

The molecule is taken apart, the bits and pieces are identified, and from this point attempts are made to understand more precisely the part played by the molecule in the life of the plant.

In pure physics NRC scientists are investigating fundamental properties of cosmic rays. They are using various kinds of spectroscopy to study the structure of atoms and molecules.

In low-temperature physics they are studying the properties of metals, particularly electrical and magnetic phenomena, at temperatures verging on absolute zero.

PURE RESEARCH in action at Canada's National Research Council in Ottawa. Using ultrasonics to study chemical processes in solution.

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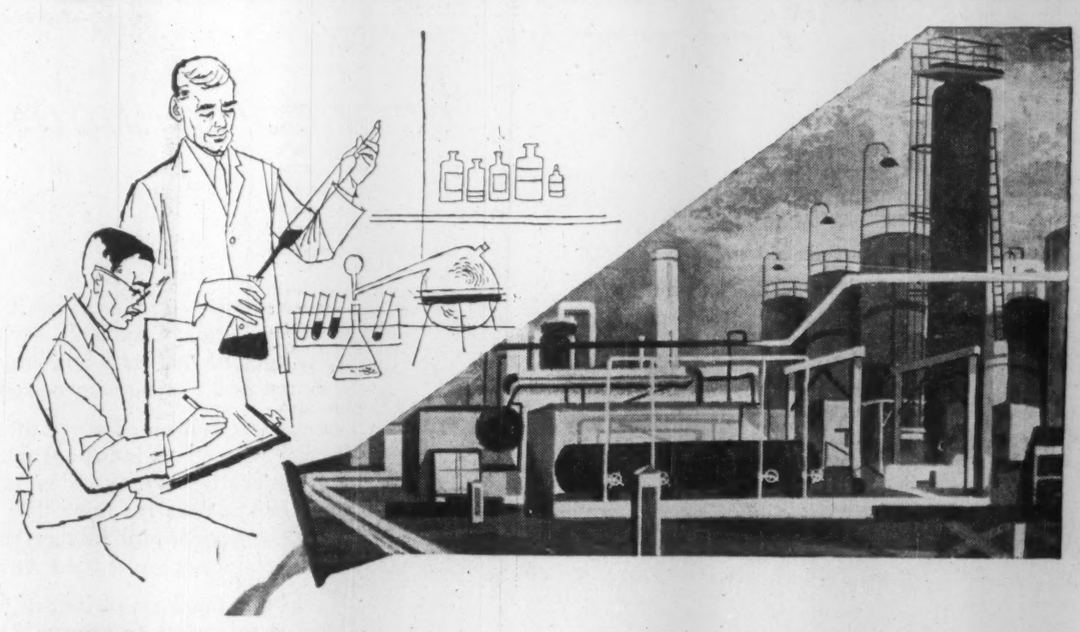

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CONTROL ROOM of Canadian Industries Ltd.'s new sulphuric acid plant at Beloeil, Que. Canadian production of this important workhorse chemical is running around 1.5 million tons a year.

Sulphuric Acid Output Easing

The sharp drop in rate of uranium mining in this country is having a major impact on sulphuric acid production.

This workhorse chemical has been one of the most essential processing tools in the whole uranium leach process.

It has been used by all the major producers in Canada's three big uranium camps—Blind River, Ont., Beaverlodge, Sask., and Bancroft, Ont.

Last year Canada consumed an estimated record 1.5 million tons of sulphuric acid.

Some 600,000 tons of this went to the booming uranium industry. But the acid requirements have been sharply cut back this year with the stretch-out in the uranium contracts.

- **Noranda Mines'** big Cutler, Ont., acid plant which had been operating at a 1,000 tons daily rate is now cutting back gradually to about half this level.
- **Canadian Industries Ltd.** which had been supplying three Blind River uranium producers from its new 200-ton daily Copper Cliff, Ont., acid plant is now having to reduce production considerably.
- **Nichols Chemical,** division of **Allied Chemical of Canada,** one of the veteran acid producers in this country with plants at Valleyfield, Que., Sulphide, Ont., and Barnat, B.C., has also been affected by slowdown in uranium mining rate at the Bancroft, Ont., camp.

Demand from other major industry users is holding up fairly well although there has been some evidence of easing demand in recent weeks from several types of industries, e.g., steel, fertilizers, textiles.

Sulphuric acid finds its way into practically every major industry in this country at some stage and its demand rate goes up and down with general level of industrial activity.

Fertilizer still accounts for the biggest use of acid—although last year for the first time, and maybe only time—the uranium industry used more. But the actual amount of acid going into fertilizer production is difficult to estimate.

The biggest user in this field is the big fertilizer plants of **Consolidated Mining & Smelting Co.** at Trail, B.C.

Following these two major industry users are a dozen or more industries that use acid in varying amounts.

Explosives manufacturers and/or materials suppliers use substantial amounts of acid but since a good deal of this is used captively by the producing firms it is difficult to estimate actual quantities going into this field.

Steel-makers use acid in their pickling process. Demand here has eased moderately recently with the somewhat easier rate in steel production.

The excessively wet spring has affected fertilizer use and indirectly demand for sulphuric acid in this field.

Actually most of the acid producers have surplus capacity at the moment. This condition is expected to continue for some months yet.

The steadily rising production of elemental sulphur in Western Canada associated

(Continued on page 71)

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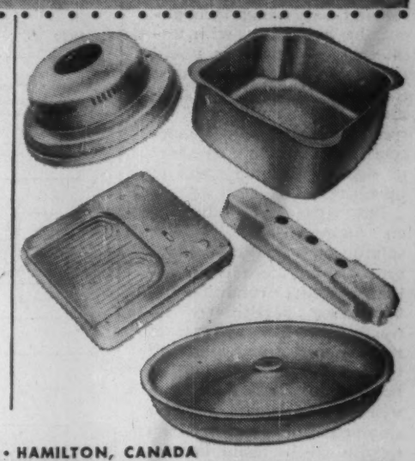

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Pesticides

Big, Expanding Trade

The annual drive to combat the hundreds of pests that annually raid Canada's field and orchard crops, livestock herds, households has become a big and expanding segment of the chemicals industry.

Sales of all types of pesticides (herbicides, insecticides, fungicides) in the year ended Sept. 30, 1959 reached $24.8 million.

This was a jump of 20% over the previous year. An important contributing factor was last year's heavy purchases of some synthetic organics — like Dieldrin — to fight the big grasshopper plague in parts of Saskatchewan.

Although it's still too early to forecast with any great degree of accuracy signs are that this will be another big year for pesticides.

Spring demand for the biggest volume herbicides — 2,4-D and 2,4,5-T—has been particularly brisk. Last year practically cleaned out all inventory in formulators' and retailers' hands.

Demand for the products from the only basic manufacturer — **Naugatuck Chemicals** — has resulted in peak capacity operations.

Last year a total of 16 million acres in Western Canada were treated with 2, 4-D and its associated product, M.C.P. This equalled the previous peak year of 1956.

There is every indication that at least as heavy an acreage will be treated this year in an attempt to hold weed loss to a minimum.

No one knows exactly what would happen if the use of pesticides chemicals on the farm should be stopped. But agricultural experts forecast that it would no longer be possible to commercially produce apples, peaches, potatoes, citrus, and tomatoes; that yields of many crops would be so drastically reduced as to gradually drive growers out of the business.

Despite the tremendous advances which have been made in pest control, pests still destroy annually in this country an estimated $700 million of crops.

At the same time the annual use of close to $25 million of pesticides of various types saves approximately $150-$200 million of the crops.

In extensive tests in a controlled area in Manitoba the University of Manitoba has found that there is an average of 250 weeds per square yard. At least 90% of the fields examined have weed counts greater than 50 weeds per square yard. From this information the university researchers assume that significant crop losses are occurring in at least 90% of the fields.

Up to now no effective pesticide has been developed to combat one of the West's worst grain weeds — wild oats. But chemical science may have at last come up with the answer that could save Manitoba farmers an estimated crop loss of $20 million a year from this weed.

Following the Western Weed Control Conference in Winnipeg in December Manitoba decided to make a thorough test of chemical herbicides this year.

Two have recently been developed in the U. S. that are said to offer great promise for control of wild oats.

One known by the trade name "Avidex" is produced by **Monsanto Chemical Co.** The second, "Carbyne", is turned out by **Spencer Chemicals, Inc.,** Kansas City.

Both of these are liquid preparations which can be applied with ordinary farm sprayers. If tests on other crops eliminate wild oats as seems to be so in the case of flax, the result would bring great changes in western agriculture.

The application of dieldrin — one of the most effective chemical formulations so far devised for control of a variety of bugs, including grasshoppers — to several million acres of Saskatchewan farmlands last year is believed to have saved huge crop losses from the indicated heavy grasshopper infestation.

This looks like another year of fairly heavy grasshopper infestation in parts of the West although egg count is not as heavy as it was in the Saskatchewan areas last year.

An interesting question in the trade is who is going to build Western Canada's first plant to make basic pesticides.

Two firms have announced plans to build such a plant over the last couple of months — Naugatuck Chemicals, division of **Dominion Rubber Co.,** and **Interprovincial Co-operatives Ltd.,** Winnipeg.

Early in March Naugatuck announced plans to construct a new plant in Western Canada to produce several key weed killers—2,4-D ad MCP — and pentachlorophenol, a wood preservative.

Option has been obtained on a 52-acre property near Edmonton. At present Naugatuck is the only basic producer of 2,4-D at its Elmira, Ont. plant. The planned Western plant would have a capacity 50% greater even than that of the present Elmira plant.

Early in April Interprovincial Co-operatives Ltd., a Winnipeg-based firm which has been formulating pesticides in a St. Boniface plant for several years, announced plans to build Western Canada's first basic pesticide plant.

The company claims its proposed plant would be big enough to meet total Canadian demand.

Although no announcement

(Continued on page 66)

Benzene: Demand

(CONTINUED FROM P. 58)

high nitrogen content that are made at a comparatively low cost.

"We have been subsidizing the farmers for years," says Taylor.

Canadian coke-oven operators produce about 35,000 tons per year. Larger tonnages are produced by **Consolidated Mining and Smelting Co.** from its base metal smelter at Trail, B.C. Much of this output is destined for export.

The petroleum industry in the U. S. is also a heavy producer, adding to the surplus of ammonium sulphate.

Coal tar is sold by the coke producers to four tar distillers. These are **Dominion Tar & Chemical Co.,** Montreal; **Barrett Co.,** Montreal; **Currie Products Ltd.,** Hamilton; and **Northern Tar & Chemical Co.,** Port Arthur, Ont.

Other major coke producers besides Stelco are **Algoma Steel Corp.,** Sault Ste. Marie; **Dominion Foundries and Steel Corp.,** Hamilton; and **Quebec Natural Gas Corp.,** Montreal.

The tar distillers use about 40 million gallon yearly, extracting such products as pitch for paving, roofing and industrial uses; creosote for wood preserving; naphthalene for phthalic resins and plasticizers; and tar acids and tar bases for further manufacture into hundreds of chemicals.

Supply and demand of coal tar are fairly well balanced, Taylor says.

"The rate at which the coal tar processing industry expands is related to the availability of coal tar."

Quebec Natural Gas is exceptional among coke producers in that the gas it produces is destined for limited domestic consumption. Most coal gas plants across Canada have shut down with the arrival of natural gas.

Coke from Quebec Natural Gas ovens is sold to foundries.

The other coke producers use both their coke and gas internally for the production of iron.

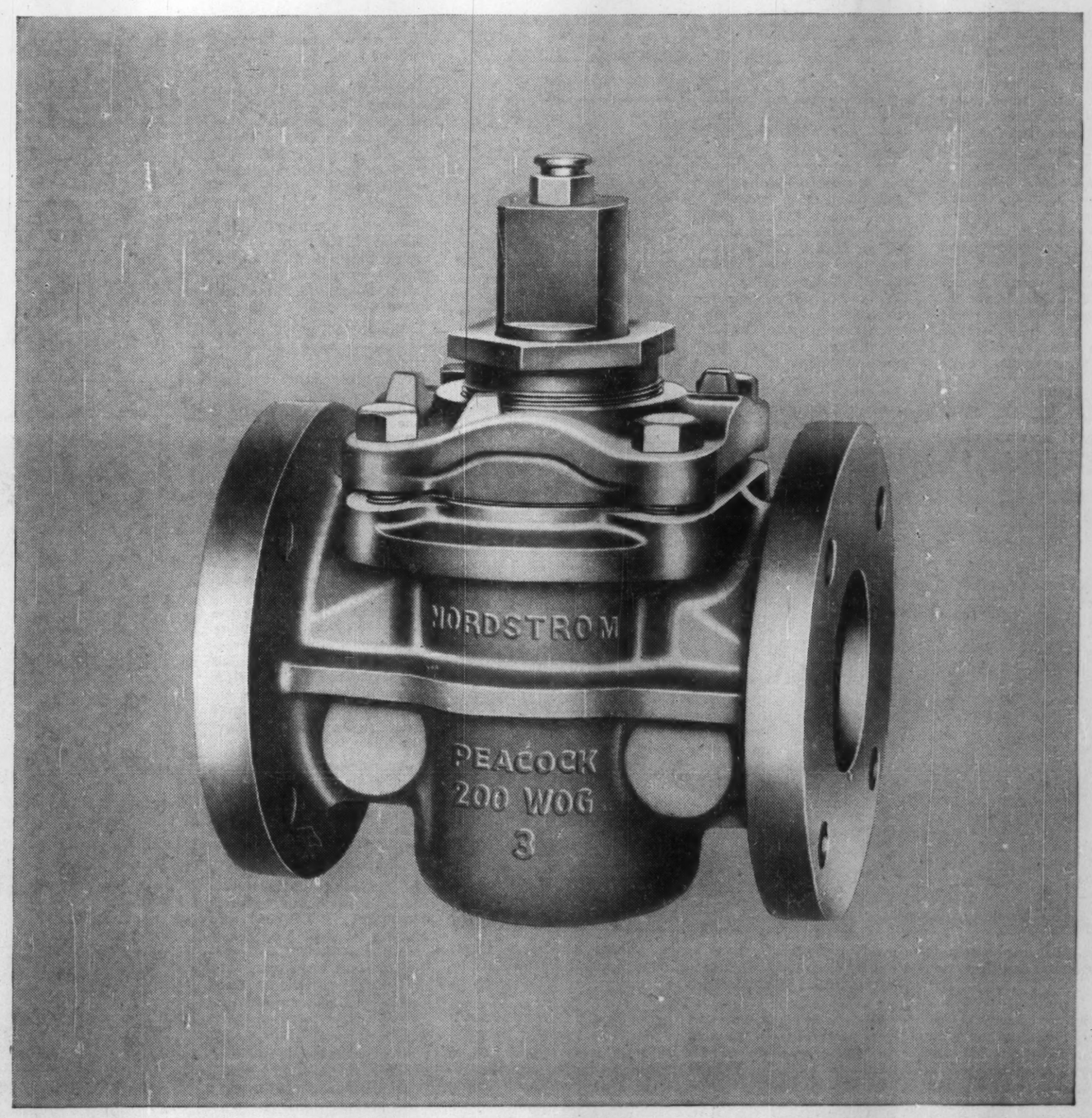
Stelco, for instance, consumes about 1.6 million tons of coal yearly to produce more than one million tons of coke, plus the gas and chemical co-products. The gas is used to heat the coke ovens, to assist in the firing of the blast furnaces and elsewhere in the steel-making operation.

Little gas is wasted by being burned off, Taylor says.

Expansion of the steel industry and its related coke production in recent years has compensated for the loss in production of coal tars with the shutdown of gas plants.

Stelco, for example, has replaced 80 coke ovens built in 1918 with 191 new ovens built since 1953. Capital investment on the ovens and coal-handling equipment was $16.5 million. Another $6.6 million has been invested in the coal chemicals plant.

Fuel gas and chemical products make a worthwhile contribution to controlling the cost of making steel, Taylor says.



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Fertilizer Demand Growing

The demand for chemically-made plant foods is steadily expanding throughout the world and with uninterrupted growth in world population this trend must continue. Actually, this demand rate should start to speed up in time as more countries start to run short of new exploitable areas of uncultivated lands.

But right now following an unprecedented postwar splurge in fertilizer plant construction there is an actual surplus condition in fertilizers, particularly in North America. **The recent rainy spring in many parts of Canada and U. S., which has kept the farmers off the land, will likely reduce fertilizer shipments this year, build up surplus stocks again in producers and fertilizer formulators hands.**

The competitive conditions in the industry — only looked on as temporary — has sharpened up marketing programs, put greater stress on offshore sales. It has expanded services to the farmer; is producing fertilizers in more easily usuable forms.

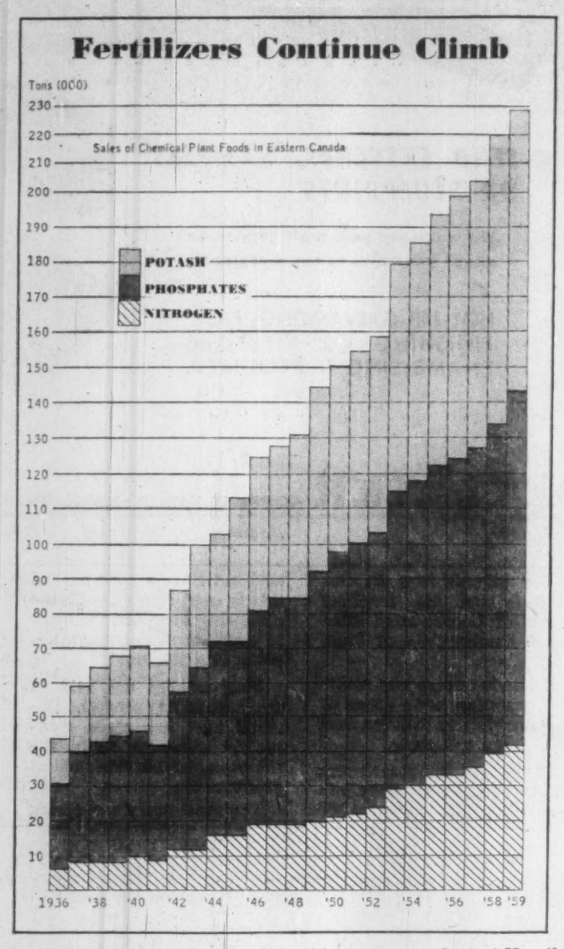
The "big three" in plant foods are nitrogen, phosphorus (phosphate) and potassium (potash). Although there is also a group of secondary food elements (calcium, sulphur and magnesium) and a third group of trace elements, the big three provides the backbone of the fertilizer industry.

Gradually the concentrations of these three basic plant foods in mixed fertilizers has been increasing. A formerly popular product of 2-12-10, for instance (in this order, nitrogen, phosphate and potash) is being replaced by one company with a new product 4-24-20 in which the plant units of each plant food is exactly doubled.

This trend towards higher analysis fertilizers is the obvious one to counteract rising labor and transportation costs. In other words it enables a farmer to apply more plant food to his acres at appreciably lower cost per unit. Canadian Industries Ltd. has increased the analysis of its average fertilizer from 22.2 food units to 30 units in the last eight years. For all of eastern Canada the nitrogen food content of fertilizers has increased 50% in the last decade. Potash content has gone up 35%.

The main thing that will eventually limit this steady climb to more potent plant food concentrations will be the ability of the farmer to apply the product to his soil in an efficient manner. The concentrations could in time reach a level where it would be very difficult to keep from applying too much at one time. This would tend to burn the plants and result in fertilizer wastage.

But this trend is causing some very important changes in chemical fertilizer operations. The manufacturers are trying to upgrade even their original materials. This is particularly so in the case of phosphate. Greater use of phosphate is now being made in the form of triple superphosphate and ammonium phosphate as against single superphosphate in use for some years. Phosphate is the one basic plant food that is not produced in Canada. It is imported into this country in the form of phosphate rock, superphosphate and sulphate of potash.



The fertilizer formulators —those firms which buy the basic plant foods and compound them, package and distribute them to the farmers, gardeners, etc. — can also now purchase higher analysis nitrogenous foods in the form of anhydrous ammonia (highest nitrogen content product), urea (highest dry nitrogen content), ammonium nitrate.

The big swing to granular form fertili rs is continuing. **An estimated 80% of all fertilizers sold in Ontario now are in granular form. Installation of special granulation equipment in plants has been one of the biggest programs in the industry over the last two to three years.** The big advantage in turning out even-size granular products — in contrast with older, uneven sized product varying from powder to chunks — is that the bothersome caking of product is reduced to a minimum. This in turn reduces storage problems. The second big advantage is that the granular product releases its plant food more evenly and slowly over a longer period.

Since there is no chemical differences in plant food offered by the different firms the great competitive accent must be on service and ready availability of products. Several of the larger firms are now offering free soil testing services and even planned fertilizer progams over several years period.

Two of the major materials manufacturers have important new projects under way to supply urea — the highest nitrogen content dry fertilizer. **Cyanamid of Canada's** big new urea plant at Hamilton Bay is now running smoothly and supplying both the Canadian and export markets. It has a capacity of around 60,000 tons annually.

The urea plant of **Consolidated Mining & Smelting** now nearing completion at Calgary is expected to come into first production this July with an annual capacity of 36,000 tons. Located close to company's other Calgary chemical and fertilizer operations it will make use of ammonia and byproduct carbon dioxide. The urea will be processed mainly into granular form.

The urea — produced in Canada for the first time — has a high nitrogen content (about 46%) and unlike quick-acting ammonium nitrate pellets which give plants a rapid "shot in the arm", urea acts a little more slowly, spreading out its boosting effect over a longer growing period.

One of the biggest developments of the decade in the Canadian fertilizer field has run into serious but not insuperable problems. This is the multi-million dollar development in Saskatchewan to produce potash for the first time in Canada. Shortly after initiating shipments from its $20 million mining development near Patience Lake (produced around 70,000 tons in all) **Potash Co. of America** was forced to suspend operations because of water seepage. The other major developer in the province — **International Minerals and Chemicals** — has also had to close down its Esterhazy, Sask. mining operation because of water seepage. **Ambitious engineering projects are being undertaken to effectively combate the water problem and again bring the mines into production.**

FERTILIZER application by aircraft was recently tried out in Cayuga, Ont. area. Urea, a nitrogenous fertilizer, turned out by Cyanamid of Canada, was applied by aircraft to farm of Bruce Mehlenbacher.

As a result of the closedown Canadian fertilizer formulators have had to again import all their potash requirements from U. S. Partly as a result of the reduced supplies U. S. potash prices have been boosted about $1.80 a ton.

Electic Reduction of Canada through its new subsidiary **Dominion Fertilizer** is presently turning out normal superphosphate at its Port Maitland, Ont. plant. Plans are to produce more concentrated fertilizers — including triple superphosphate — at this site early next year.

Sherritt now has a capacity to make 170 tons of ammonia daily of which some 100 tons are consumed in company's metal refinery at Fort Saskatchewan. This leaves some 70 tons daily available for sale. This is being sold in anhydrous ammonia form into the Pacific Northwest and offshore export markets.

The rest of the ammonia ends up in ammonium sulphate forms which is also sold to the fertilizer industry.

At its recent annual meeting president E. L. Brown indicated management was looking seriously into possibilities of expanding further into the chemicals business.

Outlook at present is for no appreciable gain in fertilizer sales in the current fertilizer year (ended June 30, 1960). Spring rains may have cut shipments down appreciably from last year. Some 80% of the year's fertilizer sales in eastern Canada are made in the two-month period April and May of each year.

Speaking of the world fertilizer price and supply situation at his company's recent annual meeting, W. S. Kirkpatrick, president, Consolidated Mining & Smelting stated:

"Since 1953, world fertilizer markets have been characterized by pronounced over-supply caused by extensive consruction of new production plants, particularly those producing nitrogenous materials.

"This resulted in a serious decline in prices, particularly in off-shore markets. In 1959 the company's operating profits from fertilizer sales was only about half of the peak profit achieved in 1953 although volume of sales was somewhat greater with unit production costs about the same. **With the continuing over-supply situation we can not foresee any substantial improvement in fertilizer prices in the near future, although we do not expect prices to continue the downward trend.**

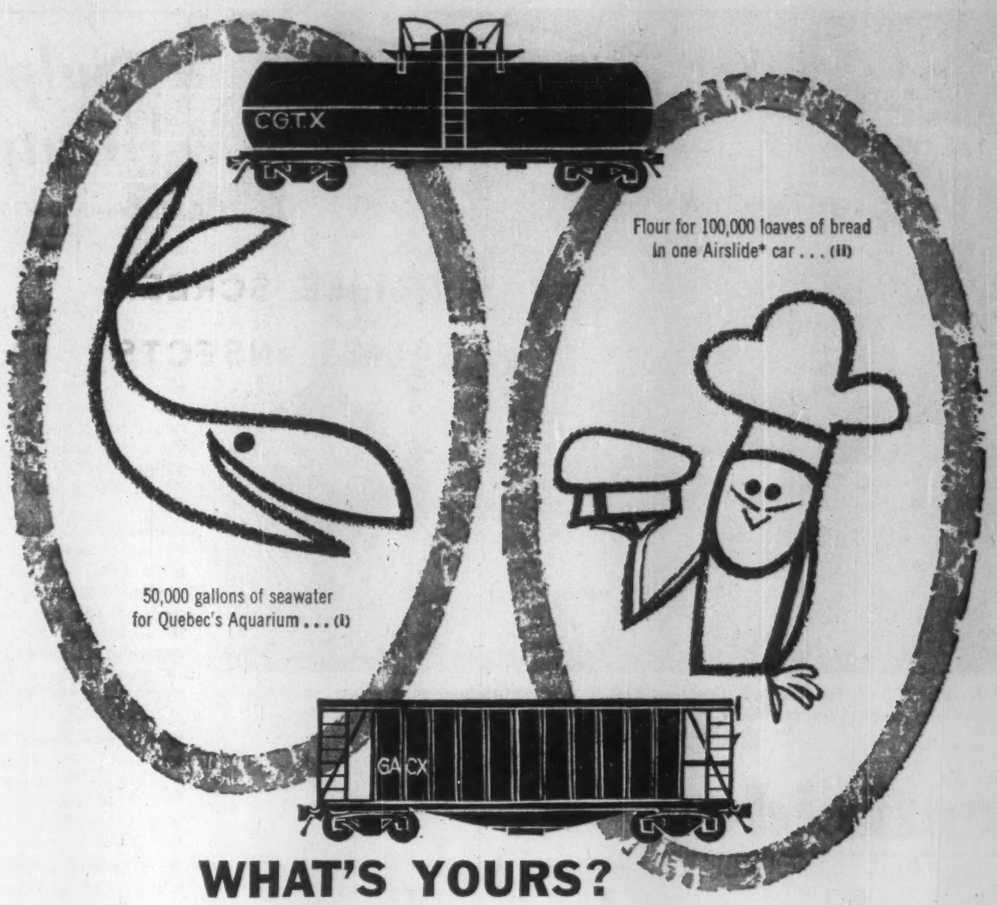
As demand approaches supply we expect that prices will strengthen to justify the construction of the new plants that will become necessary".

Total sales of fertilizers (materials and mixed fertilizers and including exports) amounted to 1,791,364 tons in the fertilizer year ended June 30, 1959. This was practically unchanged from the previous year and included sales to Canadian users of 908,214 tons including 689,553 tons of fertilizer materials and 218,661 tons of mixtures.

Imports amounted to 950,999 (946,231 tons) the more important items being natural phosphate rock 559,823 tons, superphosphate, 149,890 tons sulphate of potash, 20,654 tons. The phosphate rock was used by Canadian fertilizer plants to make superphosphate and ammonium phosphate.

Exports of materials amounted to 842,793 tons (885,064 tons). By far the greatest exporter is Consolidated Mining & Smelting from both its Trail, B.C. and Calgary, Alta. plants. Bulk of company's total 620,162 tons production in 1959 of solid fertilizers went to the U. S. northwest and offshore export markets (ammonium nitrate, ammonium phosphate, ammonium sulphate). Production of liquid fertilizers is gradually increasing, last year amounted to 56,046 tons (45,714 tons). Cominco exported substantial tonnages last year to Korea, Colombia, Spain, India and Indonesia with lesser amounts going to the Phillipines, Peru, Chile, Hawaii and Guatemala. Se-

(Continued on page 64)



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*Reg'd Trade Mark.

Seek Sales Gain

Canada's paint industry is looking to a 5%-7% gain in sales this year.

In 1959, sales of paints, varnishes and lacquers at the factory rose 4% to $139.9 million from $133.6 million in 1958.

Trade sales (through retail stores) in 1959 accounted for $87.5 million. Industrial sales (for coating products and some maintenance) totaled $42.4 million.

It's estimated that do-it-yourselfers buy about 15% of the paint sold. Contractors apply about 25%; another 20% is used for maintenance; and 40% for painting products.

Paint manufacturers are looking to two new developments to capture a growing share of the market:

- **New water-base exterior paints,** hitting the Canadian market in a big way this spring.
- **Water-thinned enamels, now under hush-hush development** by several big paint firms.

The easy-to-apply water-base exterior paints are expected to encourage a do-it-yourself boom in house painting as they already have in interior decorating.

Essentially the paint is composed of a synthetic resin, or resins, suspended in a mixture of water, pigment, certain preservatives and other agents.

The paint, if applied correctly — and manufacturers emphasize the importance of following directions — has these advantages.

- **Ease of application.** Brushing time said cut in half.
- **Fast drying permits a second coat the same day,** reduces problem of dust and insects adhering to paint surfaces.
- **Paint washes off brushes and clothes readily,** lightening the clean-up job.
- **Paint "breathes," allowing moisture** from inside the house to pass through, and reducing the blistering problem.
- **Paint can be applied to** damp surfaces.

The water-thinned enamels would cut costs of safety installations and practices in storage. Paint shops would not have to contend with fumes and the fire hazard.

Another product said to be catching on is fire retardant paint. It is regarded as particularly suitable for schools, hospitals and other public buildings. It is now used mainly on commercial buildings.

When a high temperature is reached, the fire retardant paint film begins to swell and foam, forming a thick cellular structure that provides a layer of insulation.

This insulation reduces the actual temperature of the surface, resists combustion and prevents afterglow, the makers say.

Insecticide paints is another new field. These paints cost more, but are said to repell insects for as long as two years.

This could be a useful property in restaurants.

Paint firms are hoping June will have good weather so do-it-yourselfers can get to work with brush and paint can. When summer comes, many drop this work to head for cottages.

PLASTIC FENCING

Plastics has invaded another new field with a big volume potential — fencing.

Standard Wire & Cable Co., Toronto is making a galvanized chain link fence insulated with a polyvinyl chloride plastic. The fence is obtainable in eight colors and a broad range of sizes. It is guaranteed against rot and loss of color. The plastic insulation has undergone 20-year ageing tests.

Standard is exporting fencing to parts of U. S. as well as enjoying a growing market in this country.

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These people at Cyanamid, like all of us, work at their jobs. But, like some of us, they look upon their work as more than merely routine. They look for the accomplishment of an idea... *winning the war against waste and want.*

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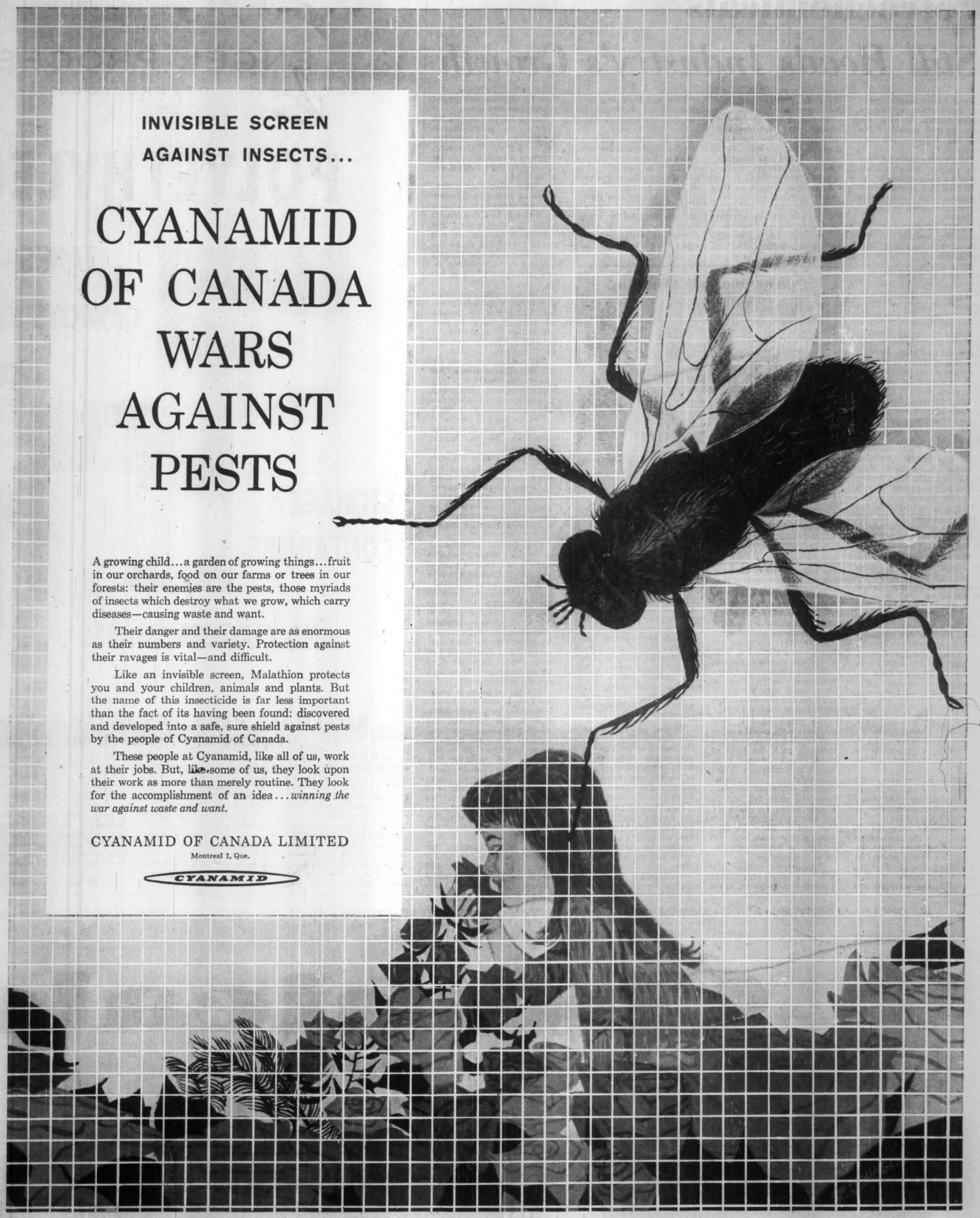
CYANAMID



FORMICA*... The world's best-known plastic laminate is also a most versatile material. Its hard, easy-to-clean surface, in 85 colours and patterns, is ideal for tables, kitchen counters or wall coverings in commercial, industrial and residential buildings. Formica is made by Cyanamid in St. Johns, Que.

MEDICINE... Cyanamid's Lederle Products—antibiotics and vitamins as well as other pharmaceutical preparations—help both in the prevention and cure of diseases. Cyanamid scientists can claim significant advances in the constant battle against the damage and waste of sickness.

FRUIT GROWING... Like people, fruit crops can suffer illness and destruction through pests. Cyanamid's new Cyprex* fungicide both protects the fruit and eradicates the causes of such infections, enabling Canadian fruit growers to market more of their healthy, health-giving products.

*REGD. TRADE MARK

Petrochemicals

Still Heads Industry's Growth

Despite a tremendous post-war construction splurge petrochemicals is still the most dynamic section of the chemical industry on this continent.

Things are happening here very rapidly. Industry leaders must be continually on their toes. New products, new processes — no matter where developed — must be quickly evaluated.

Market studies must be constantly updated in the light of exciting new product applications.

From the same hydrocarbon starting points exciting new developments like the new family of organo-metallic catalysts opens up limitless new products and property possibilities.

Dozens of new plastics are on their way, new synthetic fibres and whole new families of rubbers. These will offer a variety of properties never even dreamed of three or four years ago.

Some Canadian firms have already singled out one or more of the new products for their particular production targets.

Right now, for instance, at least four major Canadian chemical firms have their eye on a bright new plastics bet — polypropylene. There's no doubt whatever that this is going to be the next big volume plastics to hit the market and that someone is going to jump into the production race in this country.

But in the ordinary course of events all of these firms would probably prefer to wait another year before launching on such a costly new plant undertaking. But the betting in the industry is that one of the firms will jump the gun and announce such a project before that.

Although Canada's Crown-owned synthetic rubber producer — **Polymer Corp.** — has no great concern about the possibility of a domestic firm edging it out of a new rubber product it feels compelled to keep well in the van of world rubber developments and is soon going to introduce commercially a new revolutionary type rubber.

Market studies often have to be completely revised in the light of new — or faster-growing-than-anticipated — market applications.

This is the case, for instance, with the newly marketed high-density type polyethylenes. Plastic bottles for containing detergents — and eventually dozens of other products — has suddenly shot the early volume potentials for this plastic sky high.

Because it can be formed readily by blow-molding techniques — the age-long glass-making process — it can be molded into countless varieties and shapes to customers' specifications.

The rapid growth of the vinyls in several applications — floor tile, auto upholstery, etc. — has boosted demand beyond earlier expectations.

The still fast-expanding packaging applications for low-density polyethylene film has helped boom demand far beyond earlier expectations.

If polyethylene is now to capture a major share of the bread over-wrap market a tremendous new big-volume outlet will have opened up.

Demand for resins for use in surface coatings has been a rapidly growing market.

In this respect the recent commercial offering of water-based exterior paints promises to boom the market for latices of various kinds.

The development of new polymers with much greater heat resistance than ever will certainly push the field of plastics much further. For instance polypropylene is the first popularly-priced plastics that can withstand temperature well over 212 deg. F. Plastic piping for industrial processes, packaging of foods that can be boiled in their own plastic container, are just two of the new applications suggested.

Potential big volume new uses for longer established plastics — polystyrene, in the building and insulation field; phenolics in important instalation applications, vinyls in new exterior paint.

There's bound to be a stepped-up demand for butadiene as Polymer swings increasingly to production of its new polybutadiene type rubbers.

The promising new plastic, polypropylene, will create a big new demand for propylenes.

The polyurethane resins appear to have a bright marketing future. This will mean greater production of the aliphatic type raw materials.

Exciting new synthetic resins with properties comparable in many respects to metals are now in early commercial production or advanced development stages. In this family are included Du Pont's Delrin — a polyformaldehyde resin. There are several others in the polycarbonate family. These give promise of opening up entirely new fields for petrochemicals.

Several oil companies in this country have moved into the petrochemical business in partnership with chemical firms which can supply much of the essential chemical and marketing know-how. One or two others are going it alone.

One thing is certain. With the surplus refining capacity on this continent and the sharpening competitive squeeze on refinery profits more and more of these oil firms will be seeking new diversification channels, will be looking more closely than ever for possible new petrochemical undertakings.

During the past decade the growth in petrochemicals production in this country has been about 19% a year. This is a remarkable rate for a young industry not yet out of its teens.

A top Canadian petrochemical authority forecasts that petrochemicals demand by 1965 will be above the 4.5 billion lb. a year level and that actual production will not be far behind. This compares with estimated demand last year of 2.25 billion lb. and production of 2.1 billion lb.

Our per capita production of petrochemicals lags far behind that in the U. S. despite the rapid development here the last few years. Actually it is running less than one-half the U. S. rate.

But industry leaders see this **providing a tremendous growth potential** over the next few years; particularly if some measure of additional tariff protection is to come out of the big industry tariff review that is now being undertaken by the federal government.

A great deal of Canada's petrochemical expansion and diversification has been along the broad ethylene highway with major ethylene production units located at the three major refining centres, Sarnia, Montreal East and Edmonton.

The biggest development in ethylene consumption has come in the field of plastics and resins. Here polystyrene and polyethylene are the outstanding examples. Recently the availability of a large new supply source of ethylene at Sarnia from **Imperial Oil's** big new chemical cracking plant was the main consideration in location of two new plants there for first Canadian production of high density polyethylene.

The big oil boom in Western Canada with its construction of big inch transmission lines to the East and the parallel expansion in refining capacity has made available huge quantities of hydrocarbon raw materials for petrochemical growth. Sarnia, located on the big west-east oil line and at the same time ideally situated on the Great Lakes for shipping purposes, has become the No. 1 petrochemical centre in this country.

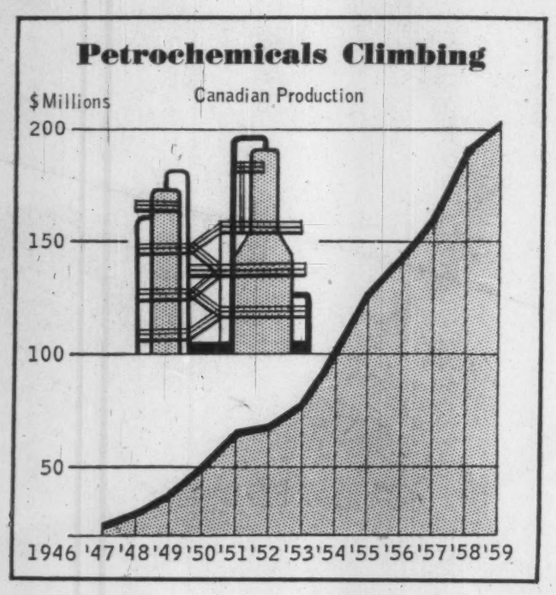
The recent approval for large-scale export of natural gas out of the country will mean development of a whole new series of gasfields, many of them in the Foothills area of Alberta. Many of these are wet gas fields with a sizeable hydrogen sulphide content.

Authorities have estimated as much as 50,000 to 70,000 barrels of gas byproducts available every day — surplus to Alberta's requirements — once export is going full out. At least three major companies — **Pembina Pipe Lines, Interprovincial Pipe Line** and **Trans-Canada Pipe Lines** — are studying plans for transporting some of this surplus to Eastern Canada and the U. S. Midwest.

The attitude of the Alberta government on large-scale export of these gas by-products—propanes, butanes, natural gasoline, etc. — will soon be known. It has recently heard the application of Pembina Pipe Line's subsidiary **Westalta Pipe Line Co.** seeking permission to construct a big gas by-products gathering system in the province.

Large-scale gasfield development in Alberta and B.C. is already resulting in steadily expanding production of sulphur (from sour gas). Last year this amounted to 320,000 long tons, or one-third of total production of petrochemicals.

By 1965, for instance, best estimates claim production will have about tripled from last year's figure. Marketing of these rising volumes will present real problems. It is obvious that rail rates will have to be cut drastically before the sulphur is moved to any important large-scale market. Fortunately, there is no storage problem.



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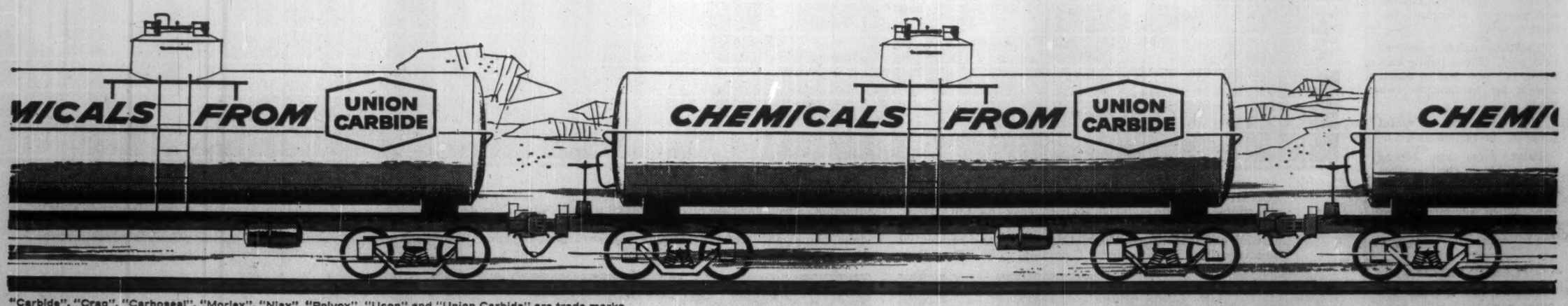

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Plastics Industry

Sales Up, More Competition

The Canadian plastics industry continued its gradually expanding production pace in the first half of this year. Although no official figures are available as yet industry authorities estimate physical sales volume is up 5 to 10% over same period last year.

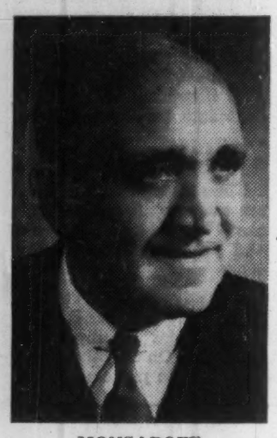
But some further downward adjustment in resin and compound prices to meet sharpening competition has probably held dollar sales about on a par with last year. **Import competition has increased in the current year reflecting rising world surplus capacity in several plastics. The price competition is probably the No. 1 problem in the industry today.**

Although export volume is holding up in both polystyrene and polyethylene the producers are finding it an increasingly tough job to sell in foreign markets.

The industry was able to chalk up another record in 1959 **with production of primary plastics reaching $103,500,000, up 6% from the previous year.** An industry survey indicated that Canadians consumed over $295 million of plastic articles during 1959. This represented a 16% gain. But imports of both plastic raw materials and finished products continued to supply approximately one-third of Canada's domestic needs.

Although exports of plastics materials increased in total, this represented a smaller proportion of over-all production and exporters found competition in foreign markets increasingly more difficult.

The estimated Canadian consumption last year of 349 million lb. of material worked out to about 20 lb. per capita, compared with 18 lb. per capita the previous year.



MONSAROFF

Adolph Monsaroff, executive vice-president, Monsanto Canada Ltd., is the 1960-61 president of the Society of the Plastics Industry (Canada) Inc. Toronto publisher E. G. Salmond is vice-president, Jack Macpherson, Canadian General Electric, London, Ont., treasurer. A. A. Allan, Jr., Carbide Chemicals Co., Division of Union Carbide Canada, Toronto and W. F. Wood, F. F. Barber, Machinery Division of Massey-Ferguson Ltd., Toronto, are directors. Mr. Monsaroff succeeds Ralph Harrison, manager of C.G.E.'s Cobourg plant.

Polyethylene leads the field both in consumption and production. Consumption jumped from 48 million to 60 million lb. **Forecasts call for a further sharp jump this year to approximately the 72 million lb. level.**

The phenolics was in second place about holding its own with last year both as to consumption and domestic production.

Polystyrene and vinyls followed to make up the big four in the Canadian plastics picture. Canadian production of polystyrene rose from 36.2 million lb. to an estimated 39 mill. lb. But some 31 million lb. went to export. Imports of 9.5 million lb. rounded out the picture.

In the case of polyvinyl chloride and acetate, production was just about the same as the previous year—around 31 million lb. but rising imports brought consumption up to 40 million lb. (36 million lb. last year).

Following these major plastics are a broad range, including the cellulosics, the latices, acrylics and nylon among the thermoplastics, and other thermosetting plastics — urea, melamine, polyester, alkyd and epoxy types.

Highlight in the polyethylene field is the continuing expansion in productive capacity in this country in line with growing domestic demand. **Canadian Industries Ltd.** completed its expansion at its Edmonton plant last fall, bringing capacity there up to 40 million lb. a year level. **Union Carbide Canada's** big additional 60% jump in capacity at Montreal East should come in late this fall. This will give Carbide an annual capacity of 66 million lb.

It is obvious that both companies anticipate polyethylene demand will continue to maintain its fast growth pace and that some export will be available to help maintain plants at a sizeable rate of expanded capacity.

But competition from imports — resins, compounds, parts and film and sheeting—has sharpened considerably in recent months causing considerable concern in the industry which operates with only a 7½% tariff protection.

Biggest proportion of polyethylene resins is going into film with packaging the biggest outlet. **Big efforts are being made to capture a sizeable part of the bread overwrap market. This would have a very big impact on film sales.**

Dow Chemical of Canada's new Sarnia plant to make linear polyethylene is now producing commercial quantities for the trade after overcoming early processing difficulties. **Du Pont of Canada's new plant - - also at Sarnia — is nearing start-up stages.** Both companies have eager eyes on the promisingly big **detergent bottle** market opening up for the linear type plastics. One authoritative estimate places amount of high density resins going into this outlet this year will be at around 5 million lb.

Polystyrene production increased about 8% last year, the export market showing another sizeable jump. Some price reductions during the year helped push sales up particularly in the export market.

One of the biggest developing markets for polystyrene is in the foam field. Big uses here would be in insulation board in homes, cold storage applications (trucks, rail cars, packing houses, etc.). Dow Chemical of Canada has gone into full production of foam boards (which can be cut and shaped just like wooden boards) and expandable polystyrene beads. The beads in turn are sold to foam-makers.

During the year **Monsanto Canada** expanded productive capacity at its Montreal plant to over 20 million lb.

Several weeks ago **Rexall Drug & Chemical Co.,** Los Angeles announced it had taken an option on 15 acres of land in Sarnia for possible erection of a new plastics plant there. The company indicated it was interested in polystyrene production. Final decision on this move is expected to be taken within the next few weeks.

There has been no great change in the phenolics picture. Competition from other molding powders continues to limit growth of this old-time plastic. **Reichhold Chemicals Canada Ltd.** has taken over the **Varcum Co.** plant at Lindsay, Ont. Reichhold will continue production here and add a line of molding compounds.

The dynamic element in the polyester picture is the great splurge in polyester-fibreglass boats. There is no doubt that boats are going to provide the big market growth over the next few years. A variety of other applications are building up including use of polyester in various auto uses, e.g. heater ducts, repair kits. Reichhold Chemicals has announced plans to start production of polyester at its Port Moody, B.C. plant.

Vinyl floor tiles continues to set the pace in the expanding vinyl field. Outlook is for further penetration still in the current year with several floor tile firms planning further expansion in vinyl capacity.

Other vinyl applications did not show the same gain, and imports again were a sharp limiting factor in the home market. Actually imports of resins jumped around 20% with main exporting countries U. S., Japan and Italy. Imports in form of film, sheeting and compounds were also up proportionately.

The big news in the vinyl field is that Dow Chemical of Canada is building a new plant to produce vinyl chloride monomer at Sarnia. Company is obtaining its additional ethylene supply from **Imperial Oil's** big nearby chemicals cracking plant.

Monsanto Canada is also expanding its vinyl chloride polymerization plant at Ville La Salle, outside of Montreal.

More and more acrylic sheet went into lighting fixtures and outside lighting. Newer uses for sheet that grew in 1959 included windows, boat windshields and skylights.

Latex-based paints increased further in popularity and as a result latex output rose around 10%. Up to now most of the latex based paint has been going into interior type paints. But with development of exterior type paints the market is bound to grow substantially over the next few years.

The epoxies made some headway during 1959 although this resin has not yet caught on as had been indicated earlier in its development. The industrial maintenance field is by far the biggest outlet for the epoxies.

Shell Oil of Canada is working closely with provincial road authorities in testing a promising new application — as a protective road overlay (against damaging effects of winter-salt sprays on roads, etc.)

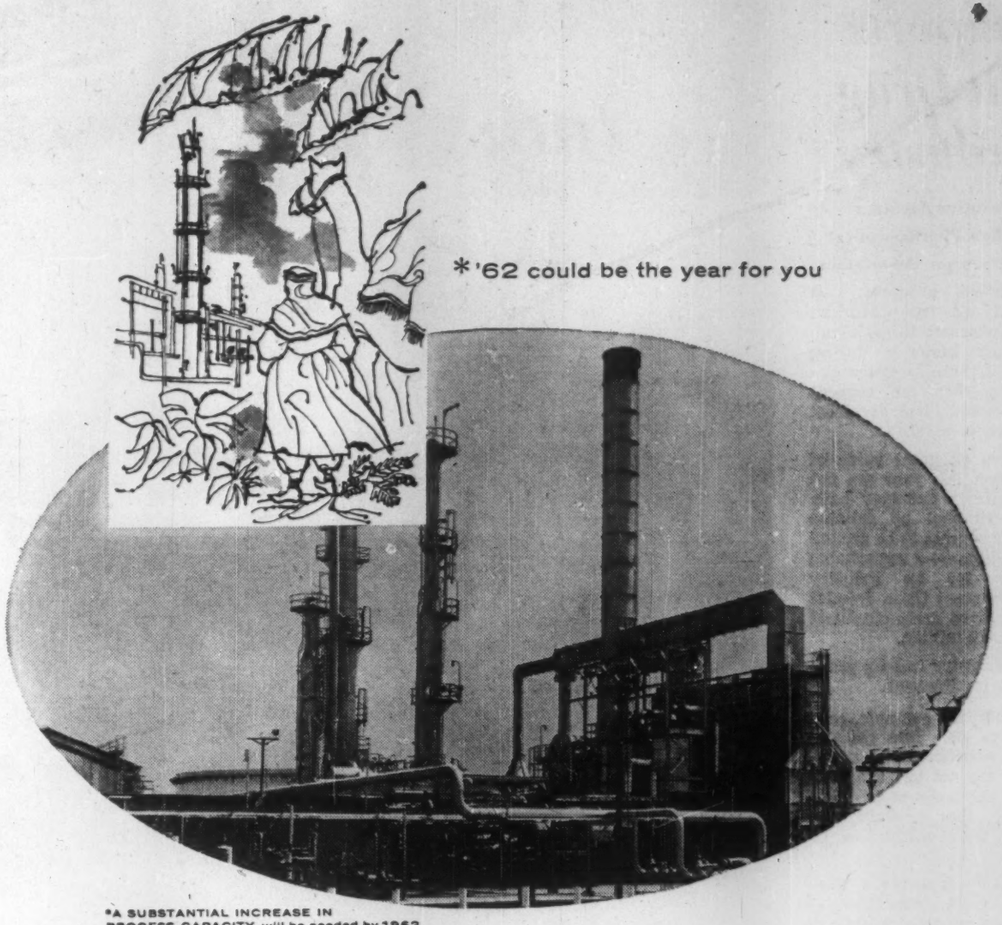
The paint industry remains the No. 1 major market outlet for the alkyds. Paint manufacturers use more of this than any other resins. Several of the paint firms have installed facilities now to make bulk of their own resin requirements.

Robinson Foams Ltd. has expanded its productive capacity for making flexib' urethane foam at its Woodbridge, Ont. plant. **Dominion Rubber,** Kitchener also entered the flexible urethane field. Reichhold Chemicals is now making the rigid foamed-in-place polyurethane resins. This relatively new product is seen to have wide marketing potential as an insulation material in construction of cold storage rooms, truck bodies, etc.

CANADIAN PRIMARY PLASTICS INDUSTRY ESTIMATED CANADIAN CONSUMPTION OF PLASTICS MATERIALS

(Thousands of Pounds)

Thermoplastic Materials	1959 Consumption
Polyethylene	60,000
Polyvinyl chloride and acetate	40,000
Polystyrene and Copolymer	17,000
Latices of Polystyrene Butadiene	11,800
Patices of Acrylics	6,900
	1,300
Cellulosics:	
Cellulose nitrate	160
Cellulose acetate	3,900
Cellulose acetate Butyrate	1,000
Ethyl cellulose and other	140
Regenerated Cellulose Film (Cellophane)	52,000
Cellulose acetate flake	24,000
Acrylics, sheet and powder	5,100
Nylon	500
SUB-TOTAL THERMOPLASTICS	223,800
Thermosetting Materials	
Phenolic Resins	55,000
Melamine Resins	8,600
Urea Resins	12,700
Polyester Resins	5,000
Alkyd Resins	26,000
Epoxy Resins	1,400
SUB-TOTAL THERMOSETTING RESINS	111,400
Other Resins not listed	6 800
GRAND TOTAL	349,000



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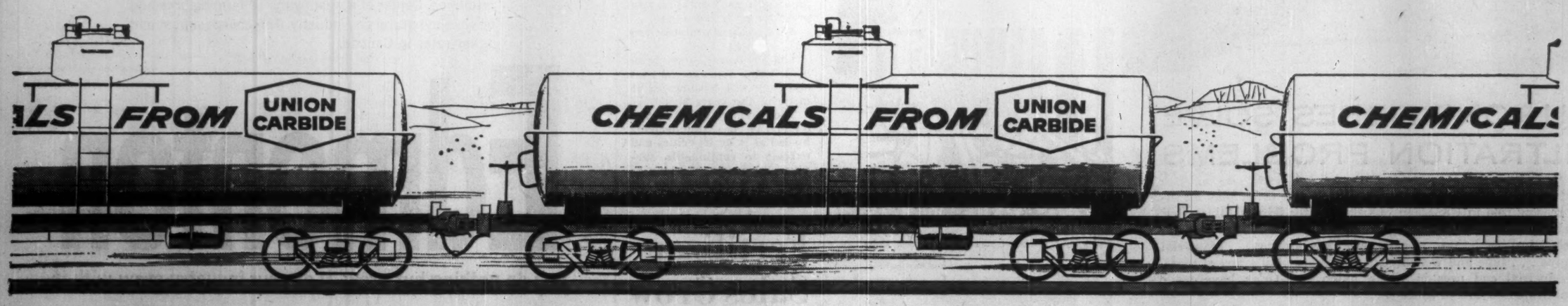

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Imports Hit Drug Industry

Executive Assistant
Canadian Pharmaceutical Manufacturers Association

Continued progress was reported by the Canadian ethical pharmaceutical manufacturing industry during 1959 and there is every expectation that the current year should be at least equally successful.

Figures on gross value of production last year are not yet available but they have been estimated by reliable industry sources to be around $170 million — a remarkable advance for an industry which, a scant three decades ago, reported gross output at around $19 million.

The industry had its problems during the year.

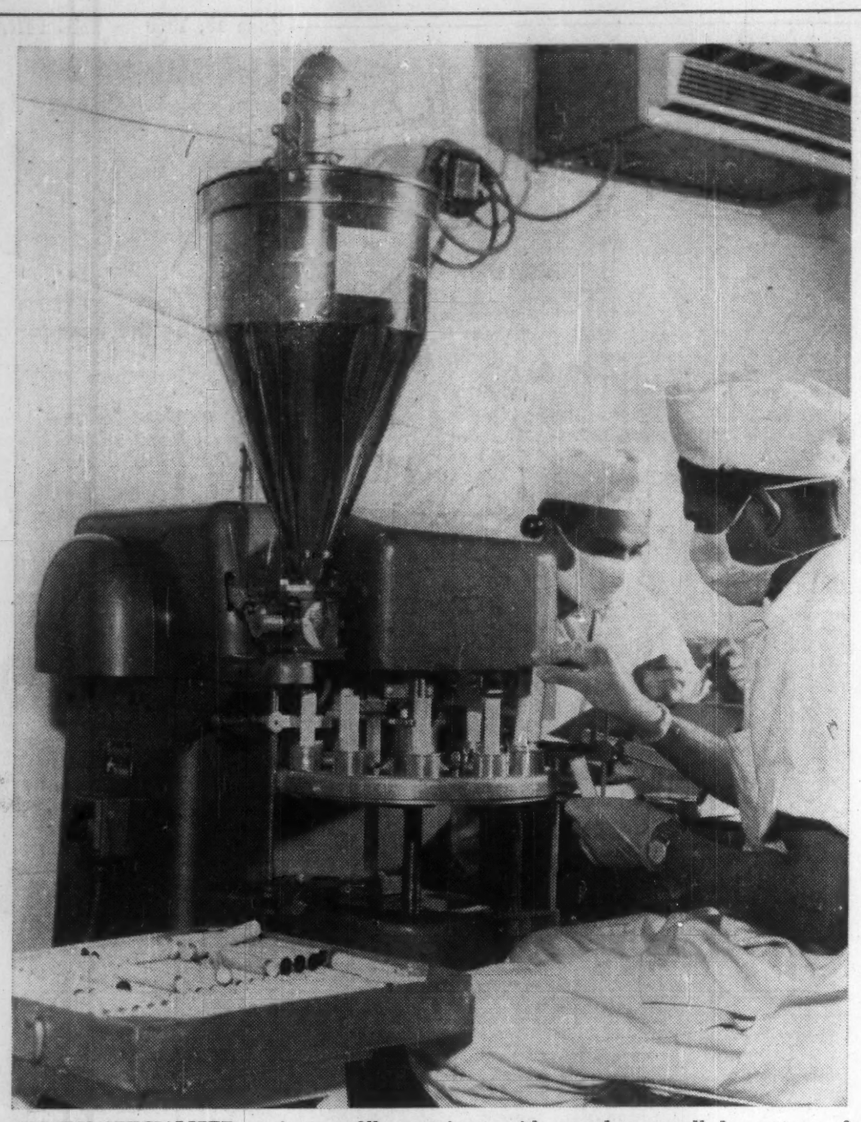
Imports, for example, continued to slice into the domestic market. Here again, figures are not yet available but on the basis of past experience, they probably accounted for about 20% of the market.

Exports constitute a relatively small proportion of the industry's total volume of business.

For the period 1950-58 the average was less than 5%.

As in a great many other secondary industries, Canadian pharmaceutical manufacturers are faced with competition from those countries where, due largely to cheaper labor, raw materials and other operating charges, costs are considerably under those in Canada.

There is little doubt that the higher per unit cost works against the industry in world markets.



HIGHLY SPECIALIZED equipment fills containers with exactly controlled amounts of ointment. Canada's pharmaceutical industry produced a record $165 million of medicinals in 1959.

The inquiry into drug company operations by a U. S. Senate subcommittee also had its effects in Canada.

There have been demands by some newspapers and by some members of both federal and provincial legislatures for a similar inquiry in Canada.

The Ontario government has established an 11-man committee to investigate the cost of drugs in Ontario institutions.

There is little doubt that this inquiry will extend into every phase of pharmaceutical manufacturing and distribution in Ontario.

It might be noted that the committee only has the power to make recommendations.

The industry has, naturally, been affected by the inflationary pressures of the postwar era and has had to contend with increased labor costs, higher prices for raw materials, machinery, equipment and, of course, increased operating overhead.

It is significant, however, that a great many of the industry's products have actually shown decreases in price despite the increase of doing business.

The answer to this seeming paradox lies in the fact that the highly competitive nature of the industry works in favor of the public in bringing down prices.

Because of the huge sums which must be spent on research and development, on production and quality control, initial prices of pharmaceuticals are, generally, high. But as demand builds up, which brings about increasing use of mass production methods, plus the inevitable competition, prices come down.

Research continued apace, despite the contrary beliefs held in some quarters.

This included basic research which, while still relatively limited, is showing a gradual but steady intensification.

It must be remembered that a great many Canadian companies are subsidiaries of foreign firms, and parent companies have far more extensive facilities and larger numbers of personnel available for basic research and development than there are in Canada.

Nevertheless, Canadian companies have followed lines of research on their own and have developed new products:

- **Charles E. Frosst & Co.** is working on an anti-cancer drug.
- **Pitman-Moore of Canada** is given complete freedom to develop its own products and recently announced the development of a new product, Novahistex, which was an improvement over the original product, developed in the United States.
- **Lederle/Cyanamid of Canada** researched and developed Temposil, used in the fight against alcoholism.

Schering Corp. Ltd. introduced a new diuretic, trichlorflumethazide and an anticoagulant, Miradon.

- **Ayerst, McKenna & Harrison Ltd.** maintains a fully equipped research laboratory and does all the research work for both itself and its parent company.

These are only a few instances of research carried on by Canadian companies.

This research is costly and it is not expected that the consumer should help pay for his share. The price of drugs has always been—and probably always will be — a matter of controversy.

Another focal point of criticism has been that brand name pharmaceuticals cost more than drugs sold under their generic names.

While this is true in many instances, it is not so in all.

Despite the clamorings of those on the generic side of the fence, their arguments do not appear to have lured very many physicians into their camp and it is they who have the final word when it comes to prescribing a therapeutic agent. The vast majority of physicians are continuing to prescribe by brand names.

None of these problems are new.

The criticisms have been made many times in the past and they will continue to be made in the years ahead.

The industry has survived despite the thunderbolts hurled at it by its critics and expects to continue to survive and prosper, so long as there is a demand for its products.

Pulp, Paper Big Buyer

The Canadian pulp and paper industry is one of the biggest consumers of chemicals.

Dozens of chemicals enter into its varied processing steps and different grade papers. Sulphuric acid, ammonia, lime, alum, caustic soda, chlorine are just a few used in substantial volumes.

The whole pulping process is a chemical one and almost continuous research is being carried on by various government research bodies, the Canadian Pulp & Paper Association and individual firms to raise quality further, make greater use of waste liquors, cut processing costs.

Here are just a few of the more important development trends at the moment:

- **High yield sulphite pulping.**

The purpose of this increasingly popular process is to get a more usable cellulose fibre out of each unit of wood. In conventional sulphite pulping process, wood chips are cooked to a pulp. In the high yield process, wood chips are cooked for a much shorter period and emerge from the digester in softened chip form. The chips are then reduced to pulp in a refiner.

Virtually all sulphite mills are now looking at this process and many are already using it. Existing equipment can be used but refiners must be added.

- **Chlorine dioxide bleaching.**

Common bleaches in wide use are sodium hypochlorite, and hydrogen peroxide.

The purpose, of course, is to whiten and brighten the raw wood pulp.

Now a new pulp bleach that shows promise is chlorine dioxide. It appears to have a number of advantages in that it yields a very white and bright pulp that retains these qualities. A new chlorine dioxide generator for pulp bleaching has recently gone into production in the U. S.

- **Chemical pulping.**

The conventional processes are the sulphite and the sulphate. One is an acid cook and the other an alkaline cook.

The advantage of the sulphite process is that it yields a pulp that requires little bleaching. On the other hand, the sulphate process yields a pulp that is very strong but requires considerable bleaching.

Another advantage of the sulphate process is that it permits recovery of chemicals for re-use in the process.

For some time there was a trend away from the sulphite process, largely because sulphate pulp could be bleached to a comparable whiteness and you can do anything with sulphate that you can do with sulphite.

The reverse is not true because the sulphite is not as strong as the sulphate.

The Magnifite process developed recently by George Tomlinson of **Howard Smith Paper Mills,** Cornwall, is similar to the sulphite process but has the advantage of the sulphate.

It uses magnesium as a cooking base in place of calcium. No concrete developments regarding use of this process are known at the moment.

The **Nova Scotia Pulp Co.** mill in Nova Scotia will use a Swedish process to produce a pulp easily bleached like sulphite but having the strength and recovery advantages of sulphate.

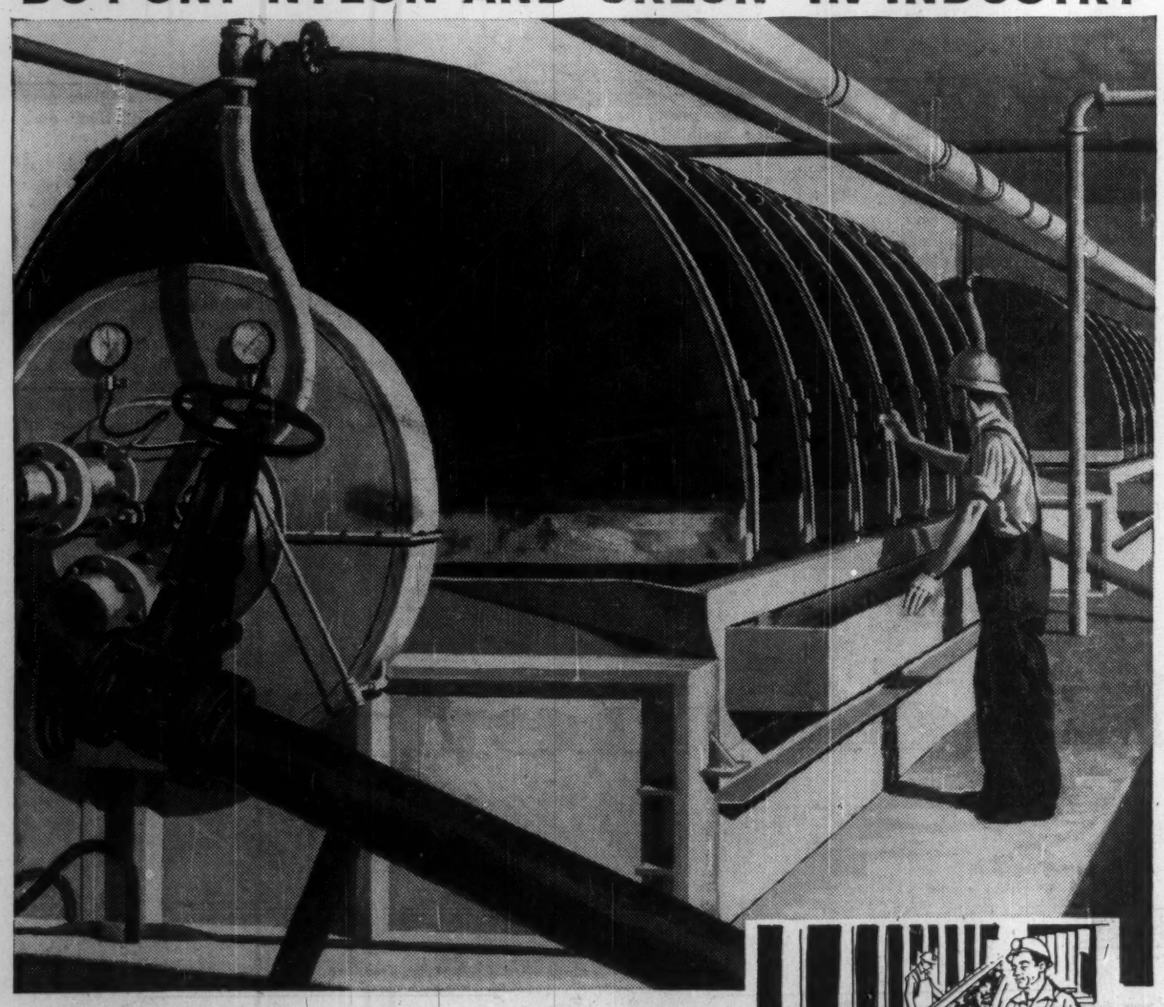
Fertilizer Sales Grow

(CONTINUED FROM P. 60)

vere competition from European and Japanese producers continued and as a result prices in all offshore markets remained at low levels.

Sherritt Gordon Mines is becoming an increasingly important factor in the western fertilizer picture. In a $1.5 million expenditure program company boosted ammonia capacity sharply, increased its stature in the whole fertilizer industry.

DU PONT NYLON AND ORLON* IN INDUSTRY



DU PONT FIBRES SOLVE FILTRATION PROBLEMS

Every day, Du Pont fibres like Nylon and *Orlon* play an increasing role in Canadian industry. Filter fabrics (illustrated above) . . . conveyor belting . . . coated fabrics . . . fire hose . . . electrical insulation . . . paper machine clothing . . . industrial rope . . . tape and webbing . . . these are only a few of many industrial end uses in which nylon and *Orlon* have made possible new design concepts.

Because of the unique combination of properties of these two Du Pont fibres, Canadian business has come to associate them with efficiency as well as economy. Let Du Pont nylon and *Orlon* reduce problems and effect savings in your business! Investigate FIRST how they can do the job best. For more information, write: Du Pont of Canada Limited, Textile Fibres Department, Box 660, Montreal.

CONVEYOR BELTS reinforced with Du Pont Nylon offer unexcelled performance in demanding applications. Du Pont Nylon provides outstanding strength, impact and tear resistance and troughability.

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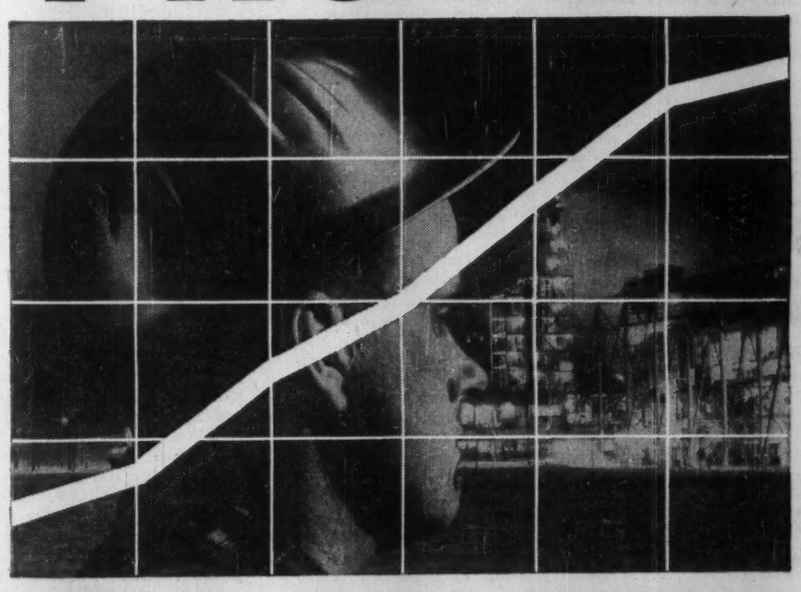
PROVEN



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The facts The fastest growing metropolitan area in Canada. Since 1949, 600 million dollars invested in industrial and commercial enterprise. Fifth highest city in Canadian retail sales.

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FP-3

Synthetic Rubber

Watch for New Changes

When major research breakthroughs in the chemical industry get further strong confirmation in pilot plant stages then the bell has begun to toll for many long-established companies and processes.

Change — rapid change — is indicated.

This is the picture today in the world's fast-stepping synthetic rubber industry.

The discoveries of new families of synthetic rubbers with properties paralleling—and in some cases improving on—nature's own is ushering in a new era in the industry.

Not to make provision straightway for the new processes in forward planning is to court disaster.

The new processes growing out of the discovery and development of organo-metallic catalysts are completely different from present day ones and will in time render all present-day plants obsolete. The change-over will not come all at once so that most rubber firms will be able to cushion the impact of the new processes over several years. The rate at which it actually takes place will depend on the economics in the over-all supply-demand picture.

The tremendous additional capital costs facing the industry for new plant and equipment is balanced somewhat by the anticipated further inroads into natural rubber's markets.

For one thing it's certain now that the new rubbers are going to enable producers to at last crack the big bus and truck tire market. Up to now even the best synthetic products could not parallel natural rubber performance in such applications where high heat build-up takes place.

Canada's big Crown-owned synthetic rubber producer—**Polymer Corp.** — is in the forefront of the rubber change. It is now making polybutadiene — one of the newer rubber types — from pilot plant operations and shipping this out in small quantities to customers for evalution. **Plans are now completed for construction of a commercial unit just as soon as scaling up of pilot plant is finished and more complete market information is available.** Such an initial commercial unit is seen costing in the $5 to $10 million range.

Polymer's big decision has been which of the two most promising of the new rubber types to make—polyisoprene (the true synthetic natural) or polybutadiene. But the company has virtually decided to back the latter. However polyisoprene has also been made in laboratory lots. There is a distinct similarity in the processes and a new plant could be flexible enough to swing from one product to the other without too much modification. Firestone Tire & Rubber in the U. S. claims its new plant will be able to make either product.

Although polyisoprene has received most of the publicity in recent months polybutadiene has improved its position materially. Polyisoprene — or synthetic natural — is essentially the same as natural rubber and because of that is believed neither better than, or poorer than, the natural product in any important respect. The key to its selling price will depend chiefly on cost of isoprene — the chief raw material — which up until now has never been made in large-commercial quantities.

On the other hand supporters of polybutadiene claim it is superior to natural rubber and the synthetic natural in resilience and abrasion resistance. On the other hand it is more difficult to process in the rubber factory than natural rubber or the synthetic natural.

The basic raw material — butadiene — is a known quantity and is already produced in substantial quantities in Sarnia. For instance, additional quantities could be produced from Imperial Oil's big petrochemical plant at Sarnia.

Large-scale commercial production of the new rubbers has important significance;

—This will remove the threat of any serious world-wide shortage of natural rubber or a prolonged runaway price situation.

—It will enable synthetic producers to compete with natural on a considerably wider front.

Here are some of the buoyant background factors behind the world rubber picture:

Average growth in rubber demand in the Western World is running about 5% a year. But last year was an abnormal one with demand zooming 14-15% (from 3.1 to 3.6 million tons). The gain was general in both Europe and North America although the rate was somewhat greater in Europe.

Since no additional production was available from natural rubber sources **nearly all the gain had to be supplied by the synthetic producers. This pretty well taxed all available productive capacity.**

Operation has continued into this year at very high levels although some flattening out in demand has been evident in the last month, reflecting mainly lower auto sales and production rates.

Polymer is producing at its highest rate in history — at an annual rate of approximately 150,000-155,000 tons, Company fully anticipates operating at peak levels throughout remainder of this year. Market breakdown is continuing in this general order — Canada 30%, U. S. 5% and others 65%.

This represents a more than triple production gain for the fast stepping Canadian producer in the last decade. Polymer is determined to hold its prominent position in the world rubber picture. Backed by one of the most modern rubber laboratories in the world and a highly trained research staff management is intent on remaining in the forefront in the new rubber developments. Company claims it is spending as much on purely synthetic rubber research as the big U. S. rubber giants.

An indication of the position Polymer commands in world rubber industry is seen in the recent agreement the company signed with Petroleos Mexicanos to provide technical assistance and advice for the design and construction of Mexico's first general purpose synthetic rubber plant.

ROPE OF POLYPROPYLENE promises to make big market inroads into ropes made out of conventional materials. Ropes made out of new plastic material are claimed lighter and stronger.

Carbon Blacks Expand

Reflecting a steadily expanding Canadian market for furnace carbon blacks **Cabot Carbon of Canada** has a further $1 million expansion program under way at its Sarnia, Ont. plant.

Another major supplier to the Canadian market — **Columbian Carbon (Canada) Ltd.** — has announced plans to build a carbon black plant in Toronto. A wholly owned subsidiary of Columbian Carbon Co., New York, the new plant would have a capacity of 40 million lb. of oil furnace blacks a year. Plans are to have this plant completed sometime in 1961.

Cabot Carbon of Canada's program will boost capacity to the 85 million lb.-a-year level. This is more than three times the Sarnia plant's initial capacity when plant started up early in 1953. Company has recently introduced three new grades of blacks to the Canadian market of the low modulus types. These are designed to meet tire-makers requirements for blacks that will help their tires retain long-wear qualities and still make for a soft ride. With addition of these new grades company now produces a range of eight grades.

Last year Cabot Carbon produced a record volume. The increase reflected peak demand from tire-makers who in turn had their biggest year in history. Substantial export of blacks to a number of overseas countries — including some Iron Curtain countries—helped boost over-all sales.

Carbon black officials have noticed some levelling out in demand lately particularly from tire-makers — by far the biggest market. So far tire production hasn't been up to earlier forecasts of a further 5% gain this year. Up to date output has been running at about the same level as last year. **Possible factors in the somewhat slower demand pace for carbon blacks — the greater import of foreign cars this year with tires attached and expanding production of carbon blacks overseas.**

Cabot Carbon's prime raw material is still a type of residual oil which so far is imported. A local supply source is expected to develop soon.

Big Sums Set For Research

Industries in Canada spend about $35 million a year for research in chemistry and chemical engineering. This amounts to a quarter of their total annual research budget.

Among the chemistry-users the largest groups are: chemical products, spending upwards of $10 million a year for research; petroleum and coal products, about $6 million; rubber products, $4 million; paper products, $4.5 million; foods and beverages, $1.5 million; textile products, $1 million; and non-ferrous metal products, $1 million.

According to the last DBS-NRC survey, two main groups — chemical products and paper products — perform 95% of their research in Canada.

This contrasts with other groups, such as petroleum and coal, and rubber products, which spend more for research outside Canada than they spend here.

Virtually all research by chemical companies is done by firms with annual sales of over $1 million. From among these the "big 15", each of which has sales of over $50 million a year, account for more than two thirds of the total.

Research expenditures for chemistry in all Canadian firms — more than $20 million a year — is about double that for chemical engineering.

Refinery Unit For Shell Oil

Shell Oil Co. of Canada will begin construction of a distillate hydrodesulphurizer at its Montreal East refinery early this summer.

Total cost of the project, including the addition of necessary auxiliary equipment: $3 million.

The operation employs a patented Shell process designed to reduce the sulphur content of distillate in the production of fuels of still higher quality for future diesel, heating oil, and aircraft applications.

Contract for the work has been awarded to **Canadian Bechtel Ltd.** Completion is scheduled for December.

As Canadian as Canada's First Citizens...

DTC, A WHOLLY CANADIAN OWNED AND OPERATED GROUP OF COMPANIES

Today, the romantic background of the Indian is fast merging into the pattern of Canada's rapid industrial and economic growth. He has become a worker with building materials, a pulp and paper engineer, a chemist. DTC too, working in these fields, is as Canadian as Canada's first citizens. Its management, labour force and the materials and services it buys are Canadian. 90% of its dividends are paid to Canadian shareholders and its operations and products sold at home and in the world's markets, make a substantial contribution to the economic health and wealth of this country.

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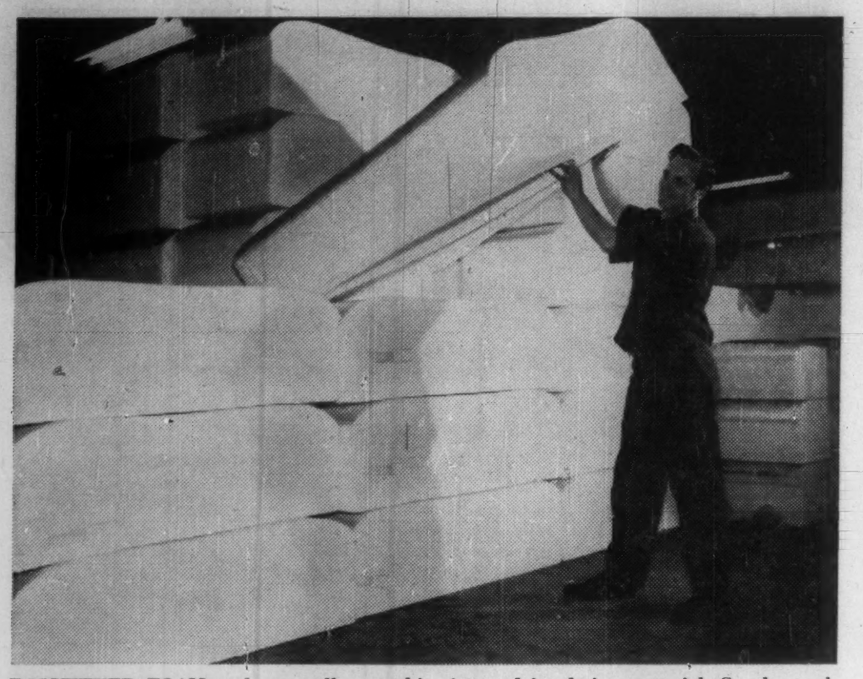

POLYETHER FOAM makes excellent cushioning and insulating material. Can be made in either rigid or flexible form.

Polyurethane
New Miracle Foam

A cushion soft enough for a favorite chair or automobile, firm enough to provide restful support in a mattress, or even firmer for the safety padding on an automobile dashboard—these are just a few of the qualities of the new miracle plastic material —polyurethane foams.

In original development of polyurethane foam, polyester resins were used. But with the advent of new foaming techniques, polyether resins have been used most successfully.

Today the polyesters are used primarily in rigid foam applications, the polyethers are rapidly taking their place in this field as well as in the flexible foam field.

An interesting new application of rigid polyurethane foam is in construction of radomes (radio-transparent cover for radar antennas) in the DEW Line. With the entry of the missile age, the designer of ground-based radomes has been faced with a new set of more exacting electrical requirements.

The Radio and Electrical Division of the National Research Council in Ottawa has come up with an entirely new concept in radome design by using rigid polyurethane foam as a structural material, because of its low electrical loss and high transparency to radio waves.

The Canadian design is believed to be the first of its kind in the world, and a prototype is undergoing electrical tests in Ottawa.

It is constructed entirely of polyurethane foam except for a nylon skin on the inside and outside surfaces.

Besides meeting most requirements for cushioned comfort, polyether foam is also excellent for packaging, insulation, sponges, toys and a thousand uses in industry and household products.

Water-thin polyether sheets provide an unusually warm yet feather-light interlining for winter clothing and insulation for sleeping bags, while rigid polyester panels make a highly effective insulation for walls and refrigerators.

A pioneer producer of polyether foam is **Robinson Foams Ltd.**, Woodbridge, Ont.

Company has been making cushioning since 1955.

The secret of producing polyether foam is based on the skill, care and accuracy used in preparing the individual formulae, each one of which requires many pages of complex calculations and specifications.

The polyethers to form the structure, fluorocarbons to expand them, silicone oils to determine the cell size, and catalysts to trigger the action, all combine in the chemical reaction.

Mix these liquids together and in seconds they react and the mixture foams and rises like bread.

The basic components are activated by intense and rapid intermixing through use of special multicylinder pumps, set to predetermined ratios for each ingredient, which inject the components through extremely high-pressure nozzles into the mixing chamber at the head of the foaming machine.

The flexible foams are now produced in multi-million pound quantities in Canada and have become a major competitor to latex in the upholstery markets. Their next major growth spurt will likely be in the mattress markets.

Although the economics of rigid polyurethane foams versus polystyrene foams are not as clearly favorable as the flexible type vs. latex foam, the technical ability to foam "in place" is expected to open up whole new vistas of application in construction in houses, cold storage rooms, etc.

Pesticide Sales Reach $24.8 Million

(CONTINUED FROM P. 59)

on site was made it is thought the company has an Alberta location in mind, probably in the Fort Saskatchewan area.

Some of the basic raw materials are available there — alcohol, chlorine and caustic soda — and this would be about the centre of the western marketing areas.

Although the three Prairie Provinces comprise the biggest part of the Canadian herbicide market chemical marketing experts claim there isn't enough business to justify expenditure on two plant undertakings in that area.

Dow Chemical of Canada has recently announced plans to build its first western unit at Fort Saskatchewan. The product would be pentachlorophenol.

The number of new pesticides seeking registration from the federal Department of Agriculture each year has slowed down somewhat from the very rapid pace of a couple of years back.

This is partly a result of the steadily rising cost of developing and testing these new formulations and the high casualty rate when government approvals are sought.

The industrial development costs, involved in making certain that a chemical is safe before it is put on the market, are high.

It's estimated that industry will spend $700,000-$1.5 million in a three to five-year period before the product reaches the market.

This means that chemical firms must maintain their own test farms and try out the new product under varying test conditions over lengthy periods.

Actually only a few of the hundreds of potential new farm chemicals studied every year are eventually approved for use.

Lengthy tests for toxicity are carried on both as to farm animals and residues left on food crops.

Some very interesting strides are being made in research into the metabolism of new pesticides, to discover what happens to pesticide chemicals inside the animal body.

Here's a breakdown of the total pesticides sales in Canada by groups for the latest year (ended Sept. 30, 1959): Agricultural dusts and sprays, $9,639,141; livestock treatments, $1,747,858; herbicides, $7,608,144; household and industrial insecticides, $5,404,943, and rodenticides, $446,886.

Biggest single pesticides usage last year was in 2,4-D formulations with the ester liquid accounting for a total of $2,878,037 of sales. The next heaviest capital outlay was in self-propelled insecticides of the D.D.T. family — $2,115,700. Sales of dieldrin reached an all-time high of $1,051,088.

Some 500 firms — mostly formulators and distributors — make up the pesticides industry in Canada today.

IMPORTS

Imports by the chemicals and allied products group of industries in 1959 totaled $327 millions compared with $290.4 millions in the previous year. Exports during the year amounted to $201.9 millions ($197.1 millions in 1958).

INVESTIGATIONS, STUDIES, EVALUATIONS and APPRAISALS for EXECUTIVE GUIDANCE

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Here's How the CIC Operates

The Chemical Institute of Canada is the national scientific and professional organization of chemists and chemical engineers in Canada.

It was formed in 1945 by the union of three predecessors, the Canadian Institute of Chemistry, the Canadian Section of the Society of Chemical Industry, and the Canadian Chemical Association.

Each year the C.I.C. holds a conference devoted entirely to chemistry and chemical engineering.

In alternate years the conference is accompanied by an exhibition at which many companies display equipment, products and literature of interest in the chemical field.

The annual conference is held in different parts of the country each year.

This year it is being held at Ottawa.

Each subject division of the Institute usually presents a technical program at the conference.

These are generally in the form of papers describing research results. Periodically special studies are made.

The recent study has been one on Canadian students undertaking postgraduate work outside Canada.

This investigation was conducted in order to discover accurately the number of chemistry and other science students who have left Canada to carry out postgraduate work, and also determine their motives and their interest in returning to Canada on completion of their studies.

Some 32 local sections of the C.I.C. are active in all the main chemical centres in Canada. The local sections arrange their own programs and hold an average of about one meeting per month during the winter season.

The second main area of direct activity is to be found in the Subject Division, at present 12.

Some of these are centred on such basic chemical divisions as organic, physical and analytical chemistry, biochemistry and chemical engineering.

Plastic Bottle

Continental Can Co. of Canada Ltd. is expanding its product lines to include plastic bottles. Production will begin July 1 this year in a new plant now under construction in the Toronto area.

The decision to add plastics to the metal and paper container production of Continental followed "intensive investigations of the packaging potential of plastics," Continental president Frank A. Whittall stated.

The new plant will be the 21st Continental Can Co. plant in Canada and will add plastic containers to lines which now include cans, metal closures, paper containers, bondware, steel containers, crowns, signs and display stands, folding cartons, corrugated containers, gummed tapes, etc.

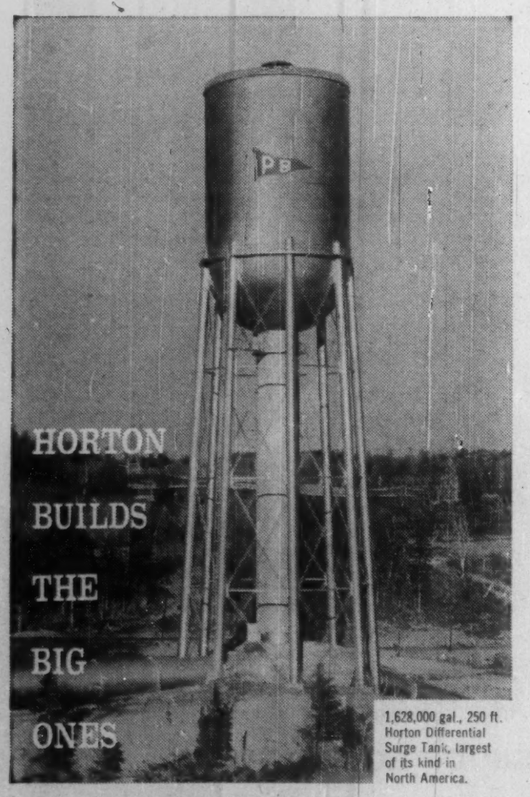
Shell Project Start Soon

Shell Oil Co. of Canada will begin construction of a distillate hydrodesulphurizer at its Montreal East refinery early this summer.

Total cost of the project, including the addition of necessary auxiliary equipment: $3 million.

The operation employs a patented Shell process designed to reduce the sulphur content of distiluate in the production of fuels of still higher quality for future diesel, heating oil, and aircraft applications.

Contract for the work has been awarded to **Canadian Bechtel Ltd.** Completion is scheduled for December.



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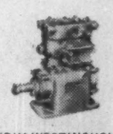
AUTOMOTIVE CANADA IS BUSTIN' OUT ALL OVER!

Perhaps no other field reflects the dynamic growth of Canada as vividly as the automotive industry. Last year, for the fourth consecutive year, Canadians invested more than one-billion dollars in new car and truck purchases. As an important contributor to the motoring world, Bendix-Eclipse feels gratified with this continuing growth that has made Canada one of the most progressive, fastest-growing nations on the globe.

Bendix-Eclipse supplies many vital "hidden" components for Canadian-owned vehicles. These include starter drives, carburetors, electric fuel pumps, and air, vacuum, hydraulic and mechanical braking systems. Here you will find such proud names as Zenith, Bendix-Westinghouse, Stromberg and Hydrovac daily adding to their already outstanding reputations for faithful and economical performance under every operating condition.

Whether you service, sell or buy automotive vehicles you can count on Bendix-Eclipse to provide the best in component parts and products.


BENDIX-WESTINGHOUSE* AIR BRAKES

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ZENITH* CARBURETOR

BENDIX* HYDROVAC* POWER BRAKE

STROMBERG* CARBURETOR

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Bendix-Eclipse of Canada, Ltd.
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'Keep Our Chemists Here'

Just how many chemists and chemical engineers are there in the Canadian chemical industry? How many outside it?

What industries are the major employers of chemists and engineers?

What's the implication of the heavy concentration of chemists and chemical engineers in secondary, rather than primary industry?

The text of a series of talks delivered by W. N. Hall, president of the Chemical Institute of Canada (1960-61) to section meetings on these questions has been released this week at the CIC's 43rd conference in Ottawa.

Here is the text.

Chemists are scattered through all the different Canadian industries as thoroughly as carbon atoms are scattered through all organic compounds.

There are more chemists and chemical engineers in the wood and paper products industries than there are foresters.

There are more chemists and chemical engineers in non-ferrous metal products than there are metallurgical engineers.

There are more chemists in foods and beverages than there are agriculturalists, and there are twice as many chemical engineers as there are geological engineers in mining.

There are probably, at the moment, somewhere in the neighborhood of 11,000 chemists and chemical engineers in Canada.

A lot of them, as is inevitable, are not practising the profession of chemistry.

But a majority is practising — in government departments, teaching, and in industries ranging from the chemical industry itself — where you would naturally expect to find them — to such more unlikely places as electrical apparatus manufacturing (where chemists and chemical engineers actually outnumber physicists), construction, public utilities, wholesale trade and retail trade.

The heaviest concentration of chemists and chemical engineers is in Chemical Products Manufacturing. However, these make up only a little over 28% of the total.

There are large numbers in government service (nearly 9%) — but the most impressive percentage is that provided by the number of chemists and chemical engineers employed in manufacturing other than manufacturing of chemicals.

Here we find 43% of the total.

There is a considerable concentration of chemists and chemical engineers in the majority of our important manufacturing industries: foods and beverages, rubber and leather products, textiles, wood and paper products, iron and steel, non-ferrous metals, electrical apparatus, non-metallic minerals, petroleum and coal.

This survey is not a complete one. But we understand that the Department of Labor made every attempt to obtain a good sample and to represent all parts of the economy fairly.

Cross-checking from other sources, we believe that 60% of working chemists are represented here, which is a fair representation of the percentage distribution of chemists and chemical engineers throughout the economy.

There is a high percentage of chemical engineers in petroleum and coal, and in wood and paper — which would be expected—and also in mining, which is more of a surprise.

A significant indication is that, while the chemical industry itself seems to employ considerably more chemists than chemical engineers, a large portion of other manufacturing industry employs more chemical engineers than chemists.

Governments, on the other hand, don't do at all handsomely by the chemical engineers — relatively speaking —though "Business Services" finds considerable use for them. The composition of this business services category consists mainly of chartered accountants, advertising agencies, labor unions, lawyers, and consulting chemists and chemical engineers.

To be safe, for use in later calculations, we have assumed that there were 10,700 active chemists and chemical engineers in Canada in 1958.

The jobs of some chemists and chemical engineers in the industries designated as secondary, and in our economy thus largely domestic, will depend on exports — but on the other hand some of the chemists and chemical engineers in the primarily exporting industries owe their jobs to domestic demands.

In total, probably only about 19% of Canadian chemists and chemical engineers owe their employment to Canadian resource, or export industries.

There is evidence that exporting industries are far less important employers of chemical professionals than is the domestic economy. A further point which follows from the figures is that secondary industry, rather than primary industry, is the area where chemical professionals find their greater opportunities.

Clearly, our interests as professional chemists lie in the continued expansion of Canadian secondary industry, rather than in the resource industries, which ship raw Canadian goods out of the country before we chemists can get our hands on them.

We believe that government policy should be directed primarily to developing new secondary Canadian industries which will demand, use and upgrade that pulp and paper, metal and ore which is presently so "surplus" that we must sell it abroad.

Unfortunately, the point that is firmly fixed in the minds of many and, most importantly, in the mind of government, is that Canadian "hewing of wood" and Canadian "drawing of water" is the basis of our prosperity, and that it must be encouraged in every possible way.

There is plenty of evidence supporting the argument that this attitude exists.

For example, everything for use in agriculture is admitted duty free into Canada — and in addition agriculture is subsidized.

If you want to build a petroleum refinery, you must pay full duty on all your equipment — but if you want to drill for oil, all your equipment and supplies are duty free.

It is well known that for a well or a mine of any kind, you may deduct special depletion allowances from your profits. It is not as well known that wells and mines get very special treatment in respect to the depreciation they may charge on their equipment. Such treatment is not extended to manufacturing industries.

This situation is not getting better. It is getting worse. And it will continue to get worse unless manufacturing gets a fairer deal — equal treatment with the resource industries — which is all we ask.

In a truly advancing economy, the percentage of total output coming from manufacturing should be increasing rapidly.

Yet, because of the relative disadvantages under which Canadian manufacturing has to operate, it climbed only from 29 to 32% of total national output from 1946 to 1956—and today, because of rapid developments in other sectors, there is some evidence it may have declined below the 32% mark.

Even more serious are the findings of the Gordon Commission that the contribution of secondary industry to Canada's Gross National Product dropped from an average 22.8% in 1947-49 to an average of 22.3% in 1953-55.

Under the assumptions of the commission's study — that the government policies will not radically change — it is expected to be only 25.3% of GNP in 1980, and will employ a smaller percentage of our population than it does today.

At the same time the importance of the resource industries, which do not employ us or keep us at home, are forecast as going up dramatically. The program of providing special privileges to the resource industries could hardly be expected to produce any other result.

Such a gloomy picture of the future of secondary manufacturing is the only one that can be drawn if policies do not change.

All over the world, trading blocs — like Europe's "Inner Six" and "Outer Seven" — are being organized to gain the benefits of mass production within their borders and thus make their industries more competitive in international markets.

It was recently reported that the OEEC has told its members it considers Canada "an excellent source of supply for primary materials . . . (and) **a first-rate market for the finished products of European industry."**

Other countries with problems similar to Canada's and which might provide a guide include Australia.

As a matter of national policy, that country has expanded its population as rapidly as possible since the end of the war. Its attitude with respect to industry is, however, quite different from Canada's.

The Premier of Western Australia was quoted recently:

"While there is still great scope for the further extension of primary industry, it is to secondary industry that we must turn to build up our population."

And Australia's Minister of Trade says:

"The growth of strong and efficient manufacturing industries is essential to Australia's progress.

"These industries are necessary to absorb the rapidly growing labor force which is greatly in excess of the requirements of the primary industries."

When the top government leaders take such stands as these, you can be sure there will be support and encouragement of secondary industries. Canada needs a similar stand.

Surely, no nation today is in greater need of increased population, and increased employment to keep it busy, than Canada. But this is only part of the picture.

Not simply the quantity of employment, but the quality of employment provided by the economy, is important — to chemists, and to everybody.

The longer we persist in importing high-class goods, the longer we will go on exporting our first-class brains.

And that is not just true of technologists. If we persist in sacrificing our secondary industries to our export industries, we lose first our scientists and our engineers — and then our most intelligent men in other academic fields, in business, even in government — because we are not building up the Canadian standard of living to the point where we can offer them enough incentive to keep on living in Canada.

Many different reasons are given for the outflow of Canadian intelligence to the U. S. About the silliest is the theory that since a number of Canadians go down south for their final post-graduate training, they stay there just out of inertia.

This is difficult to believe. If they could obtain challenging jobs at respectable salary levels — and these would not have to be as high as U. S. levels — in Canada, they would come back.

There is also a lot of opinion that considers opportunities for Canadian technologists are stunted not simply by the structure of our economy, but by the ownership of our industries.

These are the people who complain that the essentially "branch-plant" nature of many foreign-owned operations in Canada makes them

(Continued on page 73)

Use Chemical Skills

Type of Employer	Chemists Number	Chemists % of Total	Chemical Engineers Number	Chemical Engineers % of Total	Total Number	Total %
Mining	94	3	380	14	474	8
Manufacturing						
Foods and beverages	285	10	89	3	374	6
Tobacco	8	..	3	..	11	..
Rubber and leather	114	4	110	4	224	4
Textiles	79	2	92	3	171	3
Clothing	...	..	...	..	...	..
Wood and paper products	227	8	332	12	559	10
Iron and steel products	59	2	90	3	149	3
Transportation equipment	19	1	39	1	58	1
Non-ferrous metal products	89	3	213	8	302	5
Electrical apparatus	82	3	41	1	123	2
Non-metallic mineral products	81	3	57	2	138	2
Petroleum and coal products	117	4	272	10	389	7
Chemical products	943	31	708	25	1,651	28
Miscellaneous manufacturing	2	..	4	..	6	..
Construction	2	..	17	1	19	..
Transportation, storage and communication	31	1	12	1	43	1
Public utility	8	..	62	2	70	1
Trade, wholesale	3	..	...	..	3	..
Retail trade	...	..	1	..	1	..
Finance	...	..	...	..	...	..
Education (only University)	224	7	104	4	328	6
Dominion Government	346	11	64	2	410	7
Municipal Government	7	..	10	..	17	..
Provincial Government	118	4	11	..	129	2
Business Service (Inc. Consultants)	93	3	97	4	190	4
TOTAL	3,031	100	2,808	100	5,839	100

To meet a growing need...

CAUSTIC POTASH soon to be made available by C-I-L in Canada

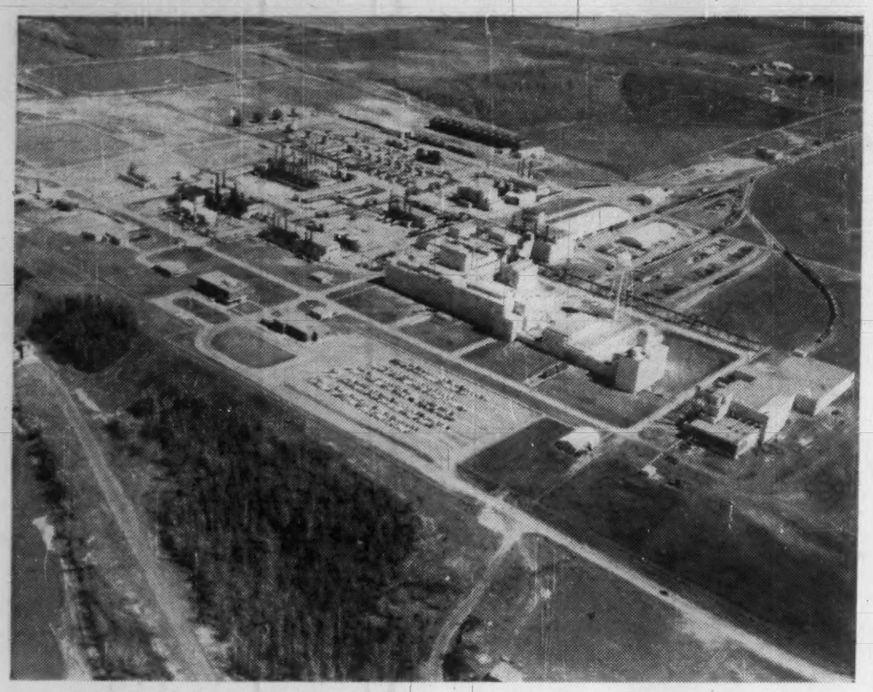
From modern mercury cell facilities in Cornwall, Ontario, C-I-L soon records another "Canadian First" with domestically produced caustic potash, hitherto available only from foreign sources.

Greater Canadian demand for caustic potash is expected and is based on its growing use in a wide range of industries . . . its emerging importance to major soap manufacturing companies, in particular, for compounding liquid, heavy-duty detergents. Caustic potash has an ever-growing importance in the production of phosphates and silicates. Other new and greater uses are currently developing.

C-I-L's plans are directed towards fulfilling industry's present requirements . . . and its future needs as well. This major move is another indication that C-I-L, in policy, service and growth, is a company in progress!

C-I-L Industrial Chemicals

Serving Canadians Through Chemistry



AERIAL VIEW of one of Canada's largest petrochemical plant complexes — the Edmonton plant of Canadian Chemical Co.

More Public Stock Sales

There are only a few wholly chemical firms in this country whose stock has been made available to the public. Some firms are privately controlled by U. S. or U. K. parent companies; others are part of larger integrated operations which include different activities, like oil refining, power development, etc.

There is a strong trend toward increasing Canadianization of the operating subsidiaries and offering of stock of Canadian operations publicly.

siderably higher compared with same period last year.

In commenting on the over-all profitability of the chemical industry Allan said that what the industry needs more than anything else are profitable new investments.

"We are constantly on the lookout for such opportunities and, I can assure you, that we shall take full advantage of those that can with profit be added to our present undertakings."

Three new subsidiary companies were added during the past year.

spectively for the previous year.

Sales of chemicals and plastics which were 21% higher on 1959 have continued at a high level in the current year.

Major increase was in the export market with pentaerythritol the No. 1 item.

The company is now one of the principal suppliers in the world of this chemical. Other chemical sales also increased substantially.

Sales of cellulose acetate were up 23% most of this going to meet the increased demand of associated plants in Mexico, Colombia and Venezuela. Sales of acetate yarn and fibres were also up principal gains being in Arnel, company's tri-acetate fibre and cigarette tow for filters.

Up to early this year demand for several of company's major export items were running beyond capacity. A $4 million expansion program that is expected to boost petrochemical capacity by as much as 40% will be completed early in 1961.

Early this year company took a closer position in the plastics molding field by becoming affiliated with Polybottle Ltd., a Toronto manufacturer of blow molded plastics.

Company does not have to make any provision for federal taxes on income since loss carried forward from previous years, together with claimable capital cost allowances, exceed the taxable income for 1959.

Stock Market Action

	High 1959	Low 1959	High 1960	Low 1960	Last
Canadian Chemical Co.	9½	6½	7½	5⅝	6⅜
Canadian Industries Ltd. ...	20¼	15	17¼	13⅛	13¾
Du Pont of Canada	29¾	19¼	26¼	20¾	22⅜
Reichhold Chemicals (Can.)	40	25	28	19	17½

Here's a brief look at four Canadian chemical firms whose common stock is listed on leading Canadian exchanges.

● **Canadian Industries Ltd.**

First quarter consolidated sales of Canada's largest chemical firm — Canadian Industries Ltd. — were about 18% above the corresponding period of 1959. Net income is also expected to show an increase.

President Peter C. Allen told shareholders at the annual meeting that over-all outlook for the remainder of the year was "reasonably good".

Terylene polyester fibre sales were higher for the three-month period, especially in export markets.

Sales of paints and explosives products were also con-

▸ **Mastex Industries Ltd.**, which acquired the business of one of Canada's leading converters of polyethylene film and is expanding its business to include polyethylene film extrusion.

▸ **C-I-L Paints Inc.**, formed to manufacture and sell Dynakote appliance enamel in the U. S.

▸ **Brandram-Henderson Ltd.**, one of Canada's best-known paint companies, which will continue to operate as a separate entity.

Consolidated net profit for 1959 of $6,245,950 was up 20.8% from previous year. Sales advanced 6%. The earnings worked out to 70c a common share (58c in 1958).

Dividends on the common stock are being paid at the rate of 50c per share a year.

● **Canadian Chemical Co.**

First report to shareholders since company became a public company showed a sharp profit improvement at $3,319,000 or 66c a share for year 1959. This compared with $770,000 and 15c re-

● **Du Pont of Canada.**

First quarter sales of Du Pont of Canada Ltd. were about 15% above those in the same period of last year, reflecting greater domestic demand for most company products and increased export business. Profits were said also "somewhat higher".

For the full year 1959 sales were up 11% to a record $90 million. Consolidated net profit was up 36.9% at $7,168,571 equal to 97c a share (70c a share in 1958). An increase in sales of textile fibres for yarn and tire cord was an important contributing factor in the improvement.

Increased exports and lower unit manufacturing costs also helped results.

The year was one of further consolidation and integration of expansion projects of recent years.

Considerable expense remains to be incurred in connection with bringing the polyethylene resins plant at Sarnia up to an economic level of production.

Dividends of 50c a share are being paid on the common stock on an annual basis.

● **Reichhold Chemicals (Canada).**

Outlook for Reichhold Chemicals (Canada) Ltd. in 1960 is "encouraging", president R. C. MacTaggart stated in the company's first annual report to shareholders. This is despite the fact that markets have been disturbed considerably by the U. S. steel strike.

Sales were down somewhat in 1959 due mainly to a strike in the woodworking industry on the West Coast. A fire at company's Ste. Therese, Que. plant last spring also affected sales of phthalic anhydride. Net profit was $187,862 as against $216,599 in the previous year ($1.14 a common share as against $1.65).

First public offering of stock was made in April, 1959. At that time 35,000 common shares were offered at $17.50 a share. Total outstanding shares are 143,750.

A dividend of 30c a share was paid on the common stock on May 20, 1960.

Sulphur Output

Major Producer By '62

Within two years Canada will become one of the major world producers of sulphur. Not only will this add another important product to our growing list of raw material exports but it will provide new incentive for further growth and diversification in Canada's chemical industry.

The federal government's recent approval for large-scale gas export to U. S. will mean development of dozens of new gas fields in Alberta particularly in the Foothills area.

Many of these are sour gas fields and will necessitate construction of many gas processing plants and removal of hydrogen sulphide. Most of this H_2S will be carried one step further into elemental sulphur form.

Sulphur authorities expect production of some 400,000 tons of sulphur in Western Canada this year, all from sour gas fields. This is just about equal to total domestic requirements. But most of the demand is in Eastern Canada and still met from lower-priced imports from the U. S.

By 1963 when the full impact of gas export is felt total production of sulphur in Western Canada is expected to sky-rocket to around 2.5 million tons a year.

The disposal of these huge tonnages at anything approaching attractive rates is still a major problem for the gas producers. Only one thing is certain. The sulphur must, and will, be moved to some markets.

Although it can be stored indefinitely, when in solid block form, the pressure to secure some returns from such tied-up assets will lead to aggressive marketing programs and eventual sales.

It is all a matter of the field netback the producers will be willing to accept. And this depends on several factors — competition from other world producers, (U. S., Mexico, France) and trend in transportation rates (rail and water), the financial ability of the producers to wait for strengthening market conditions.

Sulphur authorities see these as the primary marketing areas for Alberta sulphur — (No. 1) the Rocky Mountain and Western States. (No. 2) the Pacific Northwest. (No. 3) the Great Lakes area (Ontario together with the middle western states around the Great Lakes).

Alberta gas already enjoys a definite freight advantage over sulphur produced in the Gulf Coast of U. S. and Mexico in No. 1 district. Present sulphur consumption in the area is around 100,000 tons annually.

Canadian sulphur is already going to this market and the quantities are bound to grow. Most of it would be required in fertilizers and uranium mining.

Alberta sulphur now also enjoys a freight advantage in the inner portion of the Pacific Northwest area.

Along the coast, however, Canadian sulphur has to come up against Gulf or Mexican sulphur transported by abnormally low ocean freight rates.

At the present time Canadian rail rates are too high to enable the producers to meet U. S. sulphur prices there. But producers are hopeful that this condition could change in their favor. Canadian railroads are expected to offer lower rates in time as potential volume grows.

Then any rise in ocean rates would be to the competitive advantage of our sulphur. Most of the sulphur demand in this area at present — running around 300,000 tons a year — goes into pulp and paper processing.

The huge Great Lakes market — running around 1.5 million tons a year and expanding buoyantly — is seen the best target for Canadian sulphur. The producers are confident that in time the railroads will establish commodity rates on sulphur movement to the east that will enable large volume sales of sulphur in that Great Lakes area.

Already there has been an improvement in rail rates to certain locations e.g. to certain points in northwestern Ontario and into the U. S. midwest.

It boils down to this.

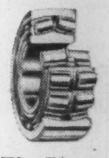
Alberta producers can move their sulphur any time they like if they are willing to take an abnormally low field price.

Right now to move a ton of sulphur to the West Coast takes around $10.50 a ton in freight charges.

It is highly unlikely that producers will adjust their wellhead prices to meet special competition from U. S. and Mexico with such high rail rates prevailing.

The same condition affects off-coast export markets — Australia, New Zealand, Hawaii, India, China, etc. But these transportation problems will be worked out in time.

A top sulphur authority — F. E. Lewis of Jefferson Lake Petrochemicals forecasts a market of 3.8 million tons by 1965. In a marketing projection for that year he sees 300,000 tons of Alberta sulphur going annually to the Pacific Northwest, 500,000 tons to the Rocky Mountain area and 700,000 tons to the general Great Lakes regions.



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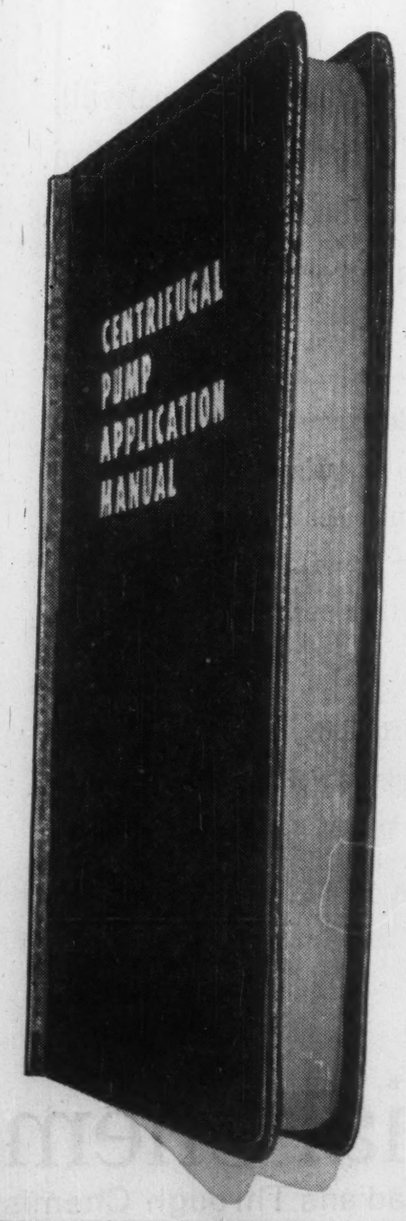

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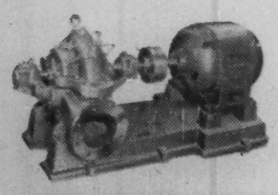

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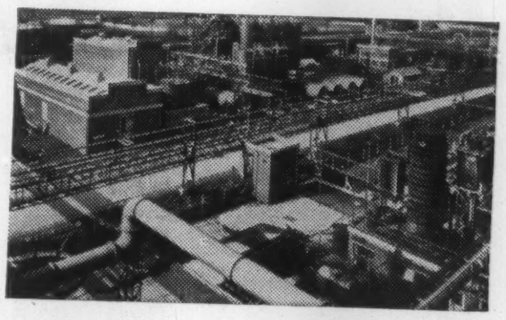
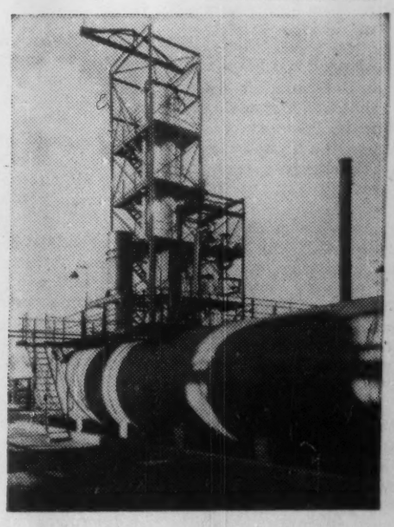


Tar Works built at a Carbonization Plant.

A 250-ton Tar Distillation Plant.



CONTINUOUS
TAR DISTILLATION
with the NEW
SIMON-CARVES
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Further view of Tar Works showing large tanks in foreground.

The New Simon-Carves Wilton pipe-still has been developed to meet the modern requirements of continuous tar distillation, namely

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(ii) **Efficient fuel utilisation**
(iii) **Accessibility of pipes for inspection and maintenance**
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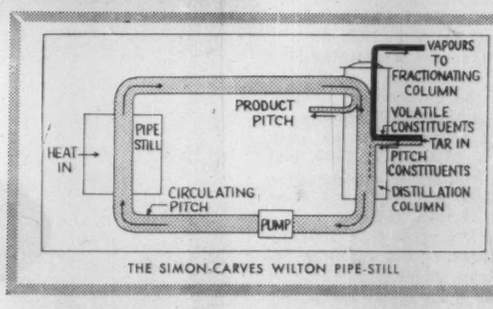

THE SIMON-CARVES WILTON PIPE-STILL

Advantages

(a) The crude tar does not come into direct contact with the pipe-still tubes, with the result that the crude tar is not directly subjected to thermal cracking conditions.

(b) As there is substantially no vaporisation in the pipe-still and as the material flowing through the tubes is a fluid of very high boiling point, no thermal cracking takes place, and overall distillation losses are therefore small.

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How Output Grows

Canada's chemical industry has been hitting a fast expansion and diversification pace in last few years.

Over the past seven years in excess of $800 million has been spent on new plant and expansion to existing facilities.

This year the industry plans a further approximate $120 million capital program with major activity in the fast-stepping petrochemical section. Further big new plant projects are in the earlier planning stages.

The following table shows where the projects are going on, projects completed or undertaken over the past year.

Firm and Expansion	When Completed	Place	Cost ($ mill.)
ALLIED CHEMICAL CANADA			
Built new unit to make aluminum chloride for use as a catalyst.	June, 1960	Amherstburg, Ont.	
B.A.-SHAWINIGAN LTD.			
Construction is well under way on plant extension to provide a 20% increase in capacity to produce phenol and acetone.	Summer, 1960	Montreal East	
B. F. GOODRICH CO.			
Expanding capacity to make polyvinyl resins (polymerization unit).	Early July	Welland, Ont.	
BROCKVILLE CHEMICALS LTD.			
Construction of large petrochemical plant to produce synthetic ammonia, hydrogen, nitrogen solutions, ammonium nitrate and other derivatives and by-products. Major raw material will be Alberta natural gas. Some products, including ammonia, will be piped to nearby Maitland, Ont., plant of Du Pont of Canada.	Spring, 1961	Maitland, Ont.	$17
CANADIAN CHEMICAL CO.			
Plant expansion will boost capacity for petrochemicals by 40%. Basis of expansion will be use of oxygen instead of air. Will necessitate new oxygen plant.	Early next year	Edmonton	$4
First production of xanthates.	Late 1960	Edmonton	
Became affiliated with Polybottle Ltd., Toronto, a manufacturer of blow molded plastics. Will make capital available for immediate expansion of Polybottle, to handle growing demand for containers.	Early 1960	Toronto	
CANADIAN INDUSTRIES LTD.			
Plant for first Canadian production of caustic potash.	Fall, 1960	Cornwall, Ont.	$0.5
Plant for first Canadian production of (PETN) pentaerythritol tetranitrate, used chiefly in explosives.	Mid-1960	Beloeil, Que.	$0.5
Expansion in productive capacity of hydrogen peroxide plant. Will entail installation of additional equipment.		Hamilton	
Purchased control of Mastex Ltd., large converter of polyethylene film with plants at Winnipeg and Toronto. New company plans expansion.	Fall, 1959		
CABOT CARBON OF CANADA			
Expanding carbon black capacity. Adding three new grades.	Late 1960	Sarnia, Ont.	$1
COLUMBIAN CARBON (Canada) LTD.			
Building plant to make oil furnace blacks. Capacity to be 40 million lb. a year.	1961	Toronto	
CONSOLIDATED MINING & SMELTING CO.			
Western Canada's first plant for production of urea.	Mid-1960	Calgary	$5.5
New plant for production of chlorine and caustic soda.	Late 1960	Warfield, B.C.	$2.6
Conversion of coke ammonia plant to use of natural gas.	Late 1960	Warfield, B.C.	$1.05
CYANAMID OF CANADA			
Construction of Canada's first plant to make urea, mainly for fertilizer use. Annual capacity, 66,000 tons.	Summer, 1959	Hamilton	
Conversion of facilities to permit use of natural gas as a raw material, replacing imported coal.	Fall, 1960	Welland	$5
Construction of a 190-ton-per-day nitric acid unit. Will provide increased flexibility and higher capacity in production of ammonia and ammonium nitrate.	Fall, 1960	Welland	
Unit for fermentation of Aureomycin.	Late 1959	Welland	
Another expansion in Formica capacity.		St. Jean, Que.	
DOW CHEMICAL OF CANADA			
Construction under way on new plant to produce vinyl chloride monomer.	Early Fall	Sarnia	over $1
Canada's first plant to make linear type polyethylene. Product now available.	Completed	Sarnia	
Plant unit for production of polystyrene beads.	Late 1959	Sarnia	
Work started on site preparation for West's first plant to make phenol.	Sept., 1961	Vancouver	$3-$4
Ground work started on first chemical unit at big Fort Saskatchewan, Alta., site. Plant will make pentachlorophenol.		Fort Saskatchewan, Alta.	
Next plant unit at Fort Saskatchewan will be for ethylene glycol and ethanolamines.	1961	Fort Saskatchewan, Alta.	
DOMINION TAR & CHEMICALS			
Completed tar plant.	1959	Hamilton	$3
Tar Acid facilities expanded.	1959	Toronto	
DU PONT OF CANADA			
Increased capacity for production of nylon intermediates.	Summer, 1960	Maitland, Ont.	$3.4
New plant to make linear polyethylene.	Nearing completion	Sarnia	
New textile yarn spinning equipment.	Late 1960	Kingston	
ELECTRIC REDUCTION CO., CANADA			
Construction of new plant for production of phosphoric acid, phosphatic fertilizer solution, triple superphosphate, sodium phosphates, food grade dicalcium phosphate.	First unit by Jan. 1961	Port Maitland, Ont.	over $12
Acquisition of Dominion Fertilizers Co. with plant producing normal superphosphate.	June, 1959	Port Maitland, Ont.	
HOOKER CHEMICALS LTD.			
Installing capacitors to reduce power costs at caustic-soda-chlorine plant.		North Vancouver	
Engineering work under way looking toward expansion of plant.			
MONSANTO CANADA LTD.			
Construction of Canada's first plant to make maleic anhydride, an important intermediate used in manufacture of polyester resins. Can produce "several" million lb. annually.	First quarter, 1961	Montreal	around $6 million
Expansion of polyvinyl chloride production facilities (polymerization) will boost capacity by about 40%.	Late this year	Montreal	

(Continued on page 70)

Vinyls Move Ahead

All present indications point to a bright future for calendered rigid vinyl sheeting in lighting applications. These include luminous ceilings, light diffusion shields, individual lighting fixtures and other imaginative light diffusion applications.

Calendered rigid vinyl is now being fabricated into fume ducting, roof flashing and similar products used in construction. Another promising market for rigid vinyl sheet is the display field — advertising signs, exhibits, etc.

Major markets for vinyls at present are fast-growing floor tile field, wire and cable insulation and sheathing, coated fabrics and plain and decorated — printed and embossed — film.

Overseas competition remains very keen both in raw materials and finished vinyl products. The industry, however, is in a position to meet European competition, but finds itself unable to meet Japanese competition with the wide disparity in labor costs, an industry spokesman stated recently.

Even vinyl producers in U. S. are being affected by heavy imports of vinyl in raw material and finished product form. The adverse affect of this situation on the U. S. domestic market further aggravates matters in Canada, as U. S. producers turn even more to Canada as an outlet for their over-production. Lack of adequate tariff protection enables it to readily enter this country, the industry official stated.

There is no doubt, too, that the fast expanding polyethylene has taken a considerable share of the market for multi-colored printed vinyl film.

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Arkansas Traveler Boats
Peterborough, Ont., Can.

54' "Celuang" Cruiser
Resine Sintetiche Ed Affini
Naples, Italy

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Monomold Reinforced Plastics, Inc.
North Tonowanda, N.Y.

18' Express Cruiser
Skagit Plastics, Inc.
La Conner, Wash.

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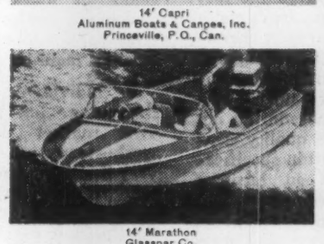
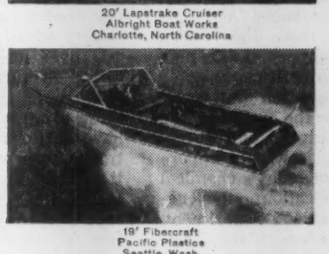
20' Cruiser
Aluminum Boats & Canoes, Inc.
Princeville P.Q., Can.

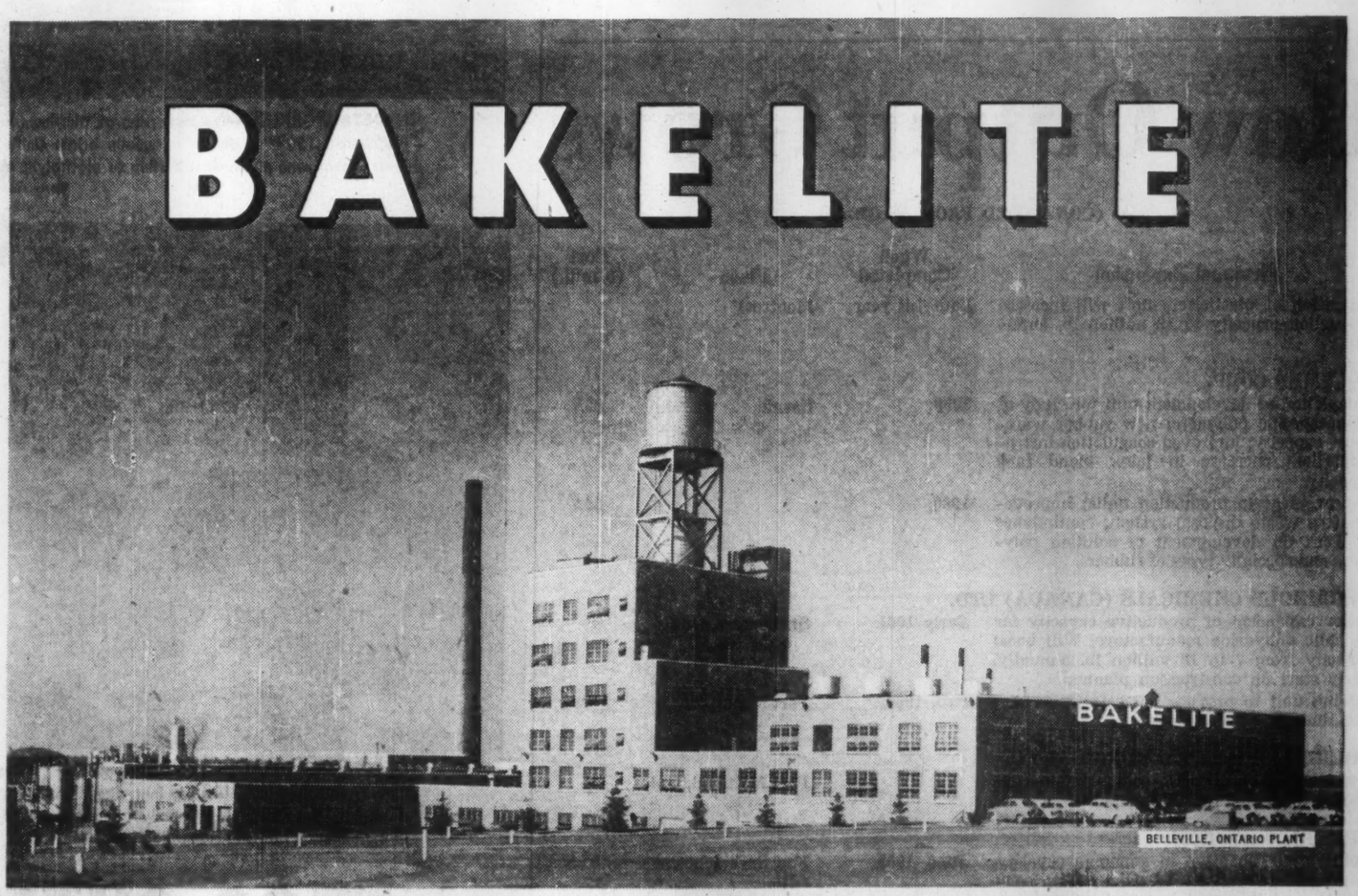
14' Capri
Aluminum Boats & Canoes, Inc.
Princeville, P.Q., Can.

20' Lapstrake Cruiser
Albright Boat Works
Charlotte, North Carolina

16' Arista Craft
Atlanta Boat Works
Atlanta, Ga.


14' Marathon
Glasspar Co.
Santa Ana, Calif.


19' Fibercraft
Pacific Plastics
Seattle, Wash.



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A CHIEF SUPPLIER OF PLASTIC RAW MATERIALS TO INDUSTRY

Polyethylene

New Packaging Concept

Polyethylene film extruders, packaging machine manufacturers and bakeries, by working closely together have overcome all but a few minor problems in what promises to be an important new packaging concept — polyethylene film everwrap for bread.

Visking Co. division of **Union Carbide Canada** by working closely with distributors and the Ontario and Quebec provincial departments of highways has developed a polyethylene film underlay for concrete highways which has resulted in a better concrete slab by permitting superior curing through prevention of moisture loss.

Two Montreal airline pilots —with some help from **Du Pont Co. of Canada** — have developed a water repellent (Ex-Rain) which has been successfully formulated for use in an aerosol form.

A new explosive was developed through the combined efforts of **Iron Ore Co. of Canada** and the explosives division of **Canadian Industries Ltd.**

Dow Chemical's work on development of a flocculant to enable rapid deposition of yellow-cake at a specified level of purity has been a big aid to Canada's uranium industry.

These represent customer-chemical firm co-operation in processing new products and working out new applications for products.

In most cases the results represent important earnings gains to both firms.

Although often the spark comes from the customer, the idea is nurtured and developed by a growingly important part of today's chemical firm organizations—the customer service department. Working closely with their own development department—they often occupy the same laboratory facilities — they methodically tailor the new product closely to customer specifications.

Customer service has increased a hundred-fold with development of more complex materials — plastics, synthetic fibres, detergents, pesticides, etc. All these require a great deal of know-how in their handling and applications. Market development has depended increasingly on close co-operative effort between chemical service people and the consuming industries.

Originally these services were developed by only the more responsible chemical companies in a sincere desire to help customers and because misuse of their chemicals could have resulted in unfavorable publicity. But in the present competitive situation these services are being offered in a package which includes the chemical material to start with, technical service and transportation assistance. More and more, the quality of the technical service can be a deciding factor in sales.

In some cases the chemical manufacturer will even provide all the plant design and construction details to enable a customer to produce new products.

A lot of the competitive push among chemical manufacturers in providing more and more of these customers' services arises from the fact that one company can't claim quality advantages in chemicals over another company. Either chemicals meet specifications or they do not and those companies who do not have sufficient quality control to keep within specifications are not in business long. These companies are then left with price and service as the two variables which can gain business. A reduction in price usually only permits a company a temporary advantage. **Service then is the one major selling feature a company can push. There is no doubt increasing competition in the domestic market will advance chiefly along these lines and chemical manufacturing will entail an increasing cost for customer service.** Every major Canadian chemical manufacturer has built, or provided, special laboratory facilities for the customer service departments; expanded staff by addition of trained specialists in this field.

But there is another all-important side to customer service. It gives the chemical firm some control over his market. A manufacturer must develop a market for a new product before he can risk the investment necessary to manufacture it. For example, **Dow Chemical of Canada** and **Du Pont Co. of Canada** — first two firms to go into domestic production of high density polyethylene — have been actively developing market outlets, working closely with potential customers for over a year. Their customer service departments are now co-operating closely with customers in seeing that their products are up to specifications and that the customer in turn knows how to use them properly for the intended market applications. In other words the chemicals manufacturer can only develop his markets through customer service and the same applies to expansion of existing facilities.

If individual consuming firms were left to do their own market development work—many of them with very limited means—it might take years to get new products on the market and/or develop new uses for them.

Initially, Canadian subsidiaries of American companies had very little to offer in the way of organized Canadian technical service. Efforts were restricted largely to having experts from the U. S. make two or three excursions a year into Canada. But soon the need for on-the-spot technical service experts was recognized.

Product development has been accelerated considerably over the past few years. With technical service people and technically trained salesmen (a relatively recent development) traveling in the field and calling on a variety of personnel in each company rather than only the purchasing agent, the flow of ideas back to the manufacturer's plant for new products has grown considerably. Soon laboratory people, who were accustomed to dealing largely with the day-to-day problems of quality control, found that they did not have the time nor the close contact required with the trade to develop the new products satisfactorily. Thus product development sections were born and often they are included along with technical service in organization charts.

Canadian Industries Ltd., Canadian Chemical Co., Dow Chemical of Canada, Du Pont Co. of Canada, Union Carbide Canada are just a few of the larger chemical manufacturing companies in this country that have expanded customer services substantially in last few years.

Research Contract Awarded

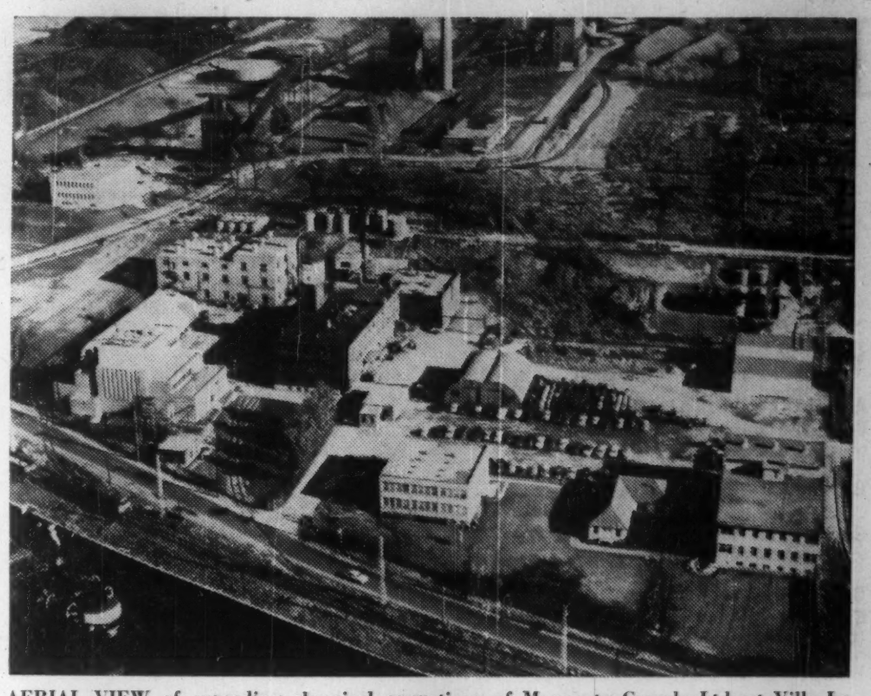
Canadian Chemical Co. has awarded a contract for construction of new research laboratories at Edmonton at a cost of $285,000 to Poole Construction Company, Ltd.

To be located on the company's Edmonton plant site, the one-story building will be of reinforced concrete, light steel frame and heavy timber deck with exterior treatment a combination of aluminum curtainwall, porcelain enameled steel panels and masonry.

It will house laboratories for organic, physical, by-product, pilot and analytical sections along with others for development work on petrochemicals and cellulose compounds.

Provision is also made for conference, library, utility and equipment storage facilities. The approximate area of the building is 11,000 sq. ft.

Plans were prepared by J. Stevenson and Associates of Calgary, in conjunction with the company's own general engineering and research departments.



AERIAL VIEW of spreading chemical operations of Monsanto Canada Ltd. at Ville La Salle, Montreal.

New Approach With 'Sieve'

The first Canadian installation of a natural gas sweetening system using molecular sieves will take place this summer in Alberta. This will mark an entirely new approach to removal of hydrogen sulphide from the gas stream. Up to now all gas sweetening has been accomplished by liquid absorption systems.

The currently available process is limited in range to gas wells containing less than 0.2% H2S, but **Linde Co., division of Union Carbide Canada**, has already tested a process designed to remove up to 40% acid gas from natural gas. This is the process to be pilot plant tested somewhere in the West this summer. Linde officials expect this development program will provide substantial reduction in cost of producing western Canada's vast sulphur - containing natural gas resources.

How Output Grows

(CONTINUED FROM PAGE 69)

Firm and Expansion	When Completed	Place	Cost ($ mill.)
Expansion of plasticizers unit will increase production capacity to 12 million lb. annually.	Late this year	Montreal	
POLYMER CORP.			
Completion of development unit for study of stereo-specific polymers; new rubber warehouse capacity; improved coagulation instrumentation; increase in latex blend tank capacity.	1959	Sarnia	$2.7
Improvement to production units; improvement to waste disposal system; continuance of work on development of solution polymers and specialty types of rubbers.	1960		$4.7
REICHHOLD CHEMICALS (CANADA) LTD.			
Major expansion of productive capacity for phthalic anhydride manufacture. Will boost capacity from 7 to 12 million lb. annually. Early start on construction planned.	Early 1961	St. Therese, Que.	
Adding unit to produce polyester resins for first time on the West Coast.	Fall, 1960	Port Moody, B.C.	
SHERBROOKE METALLURGICAL CO.			
Constructing a sulphuric acid plant in connection with zinc roasting plant.		Port Maitland, Ont.	
SHERRITT GORDON			
Substantial expansion in ammonia capacity. Can now produce 170 tons daily with some 100 tons of this used in metal refinery; remainder for sale.	June, 1959	Fort Saskatchewan, Alta.	$1.5
WESTERN CHEMICALS			
Completed 50% expansion to chlorine and caustic soda plant.	1959	Duvernay, Alta.	$1.5
SHAWINIGAN CHEMICALS			
Construction of a sodium cyanide plant.	1960	Shawinigan Falls, Que.	
UNION CARBIDE CANADA			
Broad expansion program at petrochemical plant complex. Polyethylene expansion of 30% completed May, 1959, an additional 60% expansion in productive capacity now under way.	Fall, 1960	Montreal East	
Doubling capacity of ethylene oxide and oxide derivatives production facilities.	Early 1961	Montreal East	
Polyethylene customer service and product development laboratory.	Nov., 1959	Montreal East	
Construction of new polyethylene film plant by Visking Co. division. Boosts over-all polyethylene film capacity by 50%.	March, 1960	Cowansville, Que.	
Modification of reaction equipment for production of liquid epoxy resins by Bakelite division.	Sept., 1960	Belleville, Ont.	
Linde Co. division has broad program under way for new and expanded manufacturing and compression facilities for acetylene, liquid and gaseous oxygen and nitrogen at various points across Canada.	1959 and 1960		

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IN PULP AND PAPER MILLS—Chlorine Dioxide, generated from ERCO $NaClO_3$ (Sodium Chlorate) is now the prime bleaching agent, giving quality papers eye-appealing whiteness with high brightnesses at economical costs.

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60-3M

EXCITING NEW-TYPE polyethylene plastic—now made in Canada—is finding dozens of new packaging and container applications.

Service

Expect 20%-25% Rise

Polyethylene is continuing to outpace the field in the Canadian plastics race. The forecasts are for a further 20-25% jump in Canadian consumption of resins and compounds this year.

The new high density types —just coming into commercial production this year in Canada — are expected to boost over-all polyethylene consumption a further 5 to 6 million lb.

But two developments are causing increasing concern in this, the most dynamic section, of the whole plastics industry:

—Competition from imports is increasing and putting a sharp squeeze on profits. Prices had to be cut earlier this year to meet a parallel move in the U. S. where a heavy excess plant capacity is producing some cut-throat competitive practices.

The exciting new contender for a big share of the plastics business — polypropylene — offers an impressive list of properties, will be priced competitively and will certainly make inroads into some of polyethylene's present markets.

To strengthen their position in the industry several major materials producers — and suppliers via imports — have acquired complete or participating interests in fabricating and converting firms. All the moves represent vertical integration — carrying the primary product one or more steps closer to consumer level with all this implies in improved operating efficiencies, greater market and profit potentials.

The big bolstering factor in the whole industry is this: **Plastics consumption is steadily increasing in Canada and the rate of increase is greatest in polyethylene.** But expanding world plant capacity is threatening to take over a bigger share of the domestic market.

Imports of all polyethylene resins from U. S. last year amounted to 17.8 million lb. — or approximately 30% of total Canadian consumption. But the significant point is this — the average valuation placed on these resins was 28.3c per lb. This compares with an average price for all the rest of U. S. exports of 31.3c a lb.

So far available export outlets in certain fast-expanding consuming areas in Europe and Asia have helped the two Canadian producers to dispose of most surplus production when it developed from time to time. On balance, however, Canada is a net importer.

The industry — now increased by two more producers is hopeful that out of the forthcoming extensive tariff study of chemicals and plastics some additional tariff protection will be forthcoming. At the moment polyethylene resin only gets a 7½% tariff help and this has been practically cut in two for some months now by the premium on Canadian funds.

Authoritative forecasts place total polyethylene consumption in Canada this year at around 72 million lb. This compares with 60 million lb. last year. Every major market outlet is expected to show increased demand ranging from 10 to 30%. Here is the break-down compared with 1959 figures. In the third column is a forecasted market requirement for the year 1965.

	1959	1960	1965
	—(Millions of lb.)—		
Film	21.8	26.6	52.0
Electrical	13.4	16.3	30.0
Molding	10.8	12.4	20.0
Pipe	9.1	11.2	18.0
Coating	3.4	3.4	5.0
Bottles	1.1	1.3	3.0
Others	0.3	0.8	....
	60.0	72.0	125.0

Domestically produced linear (high density) polyethylene resin will make its first major contribution to the polyethylene picture this year. **Dow Chemical of Canada is now producing it in commercial quantities at its new Sarnia plant unit. Company has been able to overcome a number of start-up "bugs" and to bring specifications up to desired standards.**

Du Pont Co. of Canada has virtually completed its plant at Sarnia to make linear polyethylene and is in early start-up stages. Commercial production could start later this year.

Both companies have eager eyes on the blow-molding bottle field which is emerging as one of the biggest potential early market outlets for the linear product. **The first major application here would be plastic detergent bottles. But the whole container field is wide open. The high density product has properties that for the first time enables use of blow-molding techniques to capture such major new markets.** Even in thin-walled sections the high density material has excellent resistance to permeability from substances packaged. It was on this point that low and intermediate density polyethylene had to be ruled out for many packaging applications.

The blow-molding technique — same as used in glass-making — because of much greater design possibilities is expected to push plastics into many new packaging applications. For instance some detergent manufacturers have already designed special plastics bottles with unique designs that will become associated with their product and become an adjunct to selling.

Canadian Chemical Co. also expects to participate increasingly in this market through its recent affiliation with Polybottle Ltd., a Toronto molding firm. Canadian Chemical is importing linear resins from U. S.

One authority estimates consumption of some 5 million lb. of high density resins this year in Canada with close to 70% of this going into detergent bottles.

The trend toward acquisition and mergers in the plastics business in this country has been speeded up by increasing competition both within the country and from exports. Most of these moves have seen resins producers acquiring fabricating and conversion firms to give them a bigger stake in the plastics market.

For a long time resins producers with ambitious expansion plans have felt themselves held back by the lack of aggressiveness and financial means on the part of some of their fabricating customers. With their own substantial means and credit ratings they have felt they would be able to go a lot further with this all-important end of the business. In other cases though it has just been a case of buying established know-how and expanded market potentials.

Union Carbide Canada's big expansion in polyethylene capacity at Montreal East will be ready by the end of this year. With a total capacity then of 65 million lb. a year this will be the third largest plant in the world outside the U. S. At the same time an affiliate company — Visking — is expanding film-making capacity further. Company has just brought into first production a new film plant at Cowansville, Que. This modern unit — Visking's third—boosts firm's over-all film capacity in this country by 50%.

The other Canadian manufacturer of low-density polyethylene resin — **Canadian Industries Ltd.** — completed its expansion at its Edmonton plant last fall. This boosts capacity of this plant to 40 million lb. annually.

Reichhold Ties-In Varcum Operation

Reichhold Chemicals (Canada) Ltd. has moved to integrate the operations of its new wholly owned subsidiary — **Varcum Chemicals Corp. (Canada)** — into its own. Varcum in Canada was originally a subsidiary of **Varcum Chemical Corp.**, Niagara Falls, N.Y.

For the past 10 years Varcum has had facilities for production of phenolic molding powders in Lindsay, Ont. Engineering and construction is now under way to improve and increase these production facilities. When completed capacity will be in excess of five million pounds of phenolic molding powders annually.

At the same time Reichhold Chemicals is currently installing a new kettle at its plant at Ste. Therese, Que., to manufacture the complete line of phenolic resins used in Lindsay.

The new Varcum Chemicals Corp. (Canada) organization will be headed up with W. G. Aird as president. Mr. Aird is executive vice-president of Reichhold.

Sulphuric Acid Output Dwindles

(CONTINUED FROM P. 59)

with natural gas production is going to have quite an impact on acid.

If a major marketing effort is going to be made to move sulphur to the biggest potential markets — Eastern Canada, Pacific Northwest and offshore — then field prices in Western Canada are going to have to be set fairly low.

This could in time result in lower sulphur prices to acid producers. It could also gradually put an end to acid production from pyrites.

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Petrochemical Growth

Petrochemicals remain one of the fastest-growing segments of the chemical industry.

Starting with only two war-time ventures—one in Calgary, another in Sarnia—the industry today encompasses some 30 plant units representing a total capital outlay of over $400 million.

Dozens of new, made-in-Canada products have poured out of these new plants; have replaced former costly imports; have created new domestic markets for a wider-range of raw materials; have spurred development in this country of many new end-products (plastics, synthetic fibres, synthetic rubbers, surface coatings, etc.).

Petrochemical production — including sulphur from gas fields — has been expanding at a 19%-a-year rate. Indications are that this fast pace will be maintained for some years ahead.

Signs are that oil refiners are about to take an even greater stride down the petrochemicals highway as a means of upgrading their products and restoring squeezed profits margins. For instance, a second major refiner is looking seriously at benzene production; another is almost certain to move into production of cyclohexane in time (raw material for nylon).

Here are the main development highlights among Canada's leading petrochemical firms:

B.A.-Shawinigan

Operations of **B.-A. Shawinigan Ltd.** at Montreal East are continuing at a high level with demand for phenol — the principal product — reflecting generally the construction tempo in the country. A further expansion has just been completed boosting phenol-acetone capacity by 20%. Capacity is now in the neighborhood of 45 million lbs. annually, representing a more than tripled plant capacity since original construction. Big outlet for phenol is in adhesives for plywood. Company sells from coast to coast in Canada and also is enjoying some export (South America, Europe, Italy).

British American Oil Co. half-owner of the company—**Shawinigan Water & Power is the other owner** — was able to boost cumene output at its Montreal East refinery by certain efficiency moves. The additional cumene was essential for the expanded phenol-acetone output at the nearby chemical plant. Benzene — a key raw material in production of cumene—is very tight at the moment and company is having to import supplies from U. S. Is believed looking seriously at possibility of getting into benzene production itself.

Cdn. Chemical

Canadian Chemical Co. is operating at virtual capacity with outlook for last six months of the year continuing bright. Company experienced its best year in history last year.

A buoyant export market for a number of company's chemicals—particularly pentaerythritol — has been major factor in the current high operating levels. The big Edmonton-based petrochemical producer is one of the principal world suppliers of pentaerythritol which goes largely into production of alkyds used in paint industry. Sales are now going to over 30 countries around the world.

Bulk of company's huge formaldehyde output is currently going into PE production (around 70%). The remainder is divided between the Canadian West Coast plywood glue market and export. Though a low price product, export is currently going to South Africa.

Major markets for company's various solvents are paint companies in the general Toronto-Hamilton area. Company is currently building a bulk terminal at Toronto to better serve its customers in the area and meet eastern competition.

Company further diversified with production last month of a group of xanthates for use in the mining industry. This is an indication of company's drive to tap basic Canadian industries with upgraded products. Company is currently investigating a number of other possible applications for its chemicals in present or modified forms.

Demand for cellulose acetate which goes largely into rayon textile yarns and staple is holding at capacity levels. Most of this product is going to affiliated companies in other countries (South America and Mexico).

An expansion program — estimated to cost around $4 million — will expand production of all company's primary products (aldehyde, formaldehyde, methanol, acetaldehyde). This in turn will permit a considerable expansion in such secondary products as pentaerythritol. This is being done chiefly by enriching the air used in primary oxygenation process with oxygen. This latest project is expected to be completed by late 1960 or early next year.

Company expects to expand its sales — via its affiliate Chemcell Ltd. — of high density polyethylene resins through an association with Polybottle Ltd., a Toronto molding firm.

Cdn. Industries

Outlook is bright for another record production year for company's expanded polyethylene plant at Edmonton (now up to 40 million lb. yearly capacity level). Industry forecasts another 20% jump this year in consumption of polyethylene resins in this country. Growth in film market for packaging applications will again show a big increase. Although not as profitable there are continuing export outlets this year for surplus production.

The heavy over-capacity for polyethylene output in U. S., in conjunction with small tariff protection here, is resulting in steadily increasing competitive pressure on producers. Price of the bulk of the material coming in is considerably below the going rate for standard material in the U. S.

C-I-L is expected to expand its place in the plastics field through its recent purchase of **Mastex Ltd.** — an important established converter in the packaging field.

At the same time company is offering the promising new plastic material — polypropylene — in this country through an arrangement with one of the big early U. S. manufacturers, Hercules Powder.

Terylene production levels are at the highest in the history of the Millhaven, Ont. plant.

The Millhaven ammonia plant — biggest in eastern Canada — is operating smoothly. But surplus capacity will be further increased when another plant comes into production at Brockville, Ont. (**Brockville Chemicals Ltd.**). This will steal away one of C-I-L's biggest ammonia customers — **Du Pont of Canada.**

Dow Chemical

Is still maintaining its rapid expansion and diversification record. Has started construction of a plant to make vinyl chloride monomer at its Sarnia works. This will be the second monomer plant in Canada (**Shawinigan Chemicals** is also producing it at its Shawinigan Falls site). Main raw materials are ethylene and chlorine both of which are basic Dow building blocks.

Company has had plenty of headaches in bringing its new linear polyethylene plant into satisfactory operation at Sarnia. Hopes are high now that most of the early difficulties have been overcome. Recent tests show product is up to company's desired specifications for a major market outlet. Company is now actually selling it commercially. The blow-molding market for detergent and other containers looks good. Dow is using a modified Ziegler process.

Work has already started on western Canada's first plant to make phenol — at Vancouver. Expected to have plant completed by Sept., 1961. An expenditure of between $3 and $4 million is expected to be made on plant construction. Toluene is the basic raw material and will be imported from U. S. at first. It is not available at present in B. C. Dow is ushering in a new process at this Vancouver plant. Other phenol producers — and aspiring producers — throughout the world will be watching results closely.

First groundwork is under way at company's 670-acre Fort Saskatchewan, Alta. property. First plant unit will be for manufacture of pentachlorophenol, a wood preservative. The second plant unit will produce ethylene glycol and ethanolamines. That will be started sometime next year. Other plant units will follow in time.

Major raw materials will be purchased at first in the area — chlorine, ammonia. Arrangements are now being made for ethylene supply. This could be produced via ethane from natural gas available in the area.

Company is rather proud of its development in expandable polystyrene beads. These beads — said to have good self-extinguishing properties — will be sold to foam-makers for use in a number of applications with biggest volume going into building and product insulation. Is said to provide good insulation properties in buildings (houses, cold-storage buildings, transportation trucks and refrigerator cars). Outlook bright for using it in a sandwich panel building material.

In a move to widen its participation in the plastics — and packaging — market, Dow acquired a long-established converting firm, Bradshaw's Ltd. With plants in Toronto and Montreal Bradshaw's converts plastics, films, paper and foils into packaging for consumer and industrial products

Du Pont of Canada

Company's new Sarnia plant for production of linear polyethylene is completed and plant start-up operations are being carried on. As in the case of other high density polyethylene producers some time is expected before all production bugs have been ironed out and product is up to company's desired specifications. Like other producers Du Pont has hopes of early entry into the buoyant detergent bottle market with its resins.

Company's Maitland, Ont. plant for production of the acrylic fibre Orlon has been operating smoothly. Sales have been expanding each year with some 85-90% of total fibres going into the sweater market (mostly ladies' sweaters). Company is working for greater market diversification for its fibres in the textile field. Plant's capacity is still considerably greater than total Canadian market. Basic raw material is acrylonitrile which is all imported from U. S.

Nylon operations are growing at a slower pace with auto tire market taking the greater poundage. Hopes are still high that nylon will soon crack the original equipment market with auto manufacturers. Estimate nylon is getting around 35% of total Canadian tire cord market as it is. Expansion in use in textiles is closer to population growth trend although from time to time new fields open up e.g. children's and men's nylon outerwear. The big growth in demand for textured yarn (stretch socks, tights, etc.) has appeared to level out.

Company is still importing one of its basic raw materials for nylon — cyclohexane — from U. S. One of the major Canadian refiners is looking closely at the possibility of producing it in this country.

The other important nylon raw material — ammonia — will soon be supplied from a new nearby plant being built by **Brockville Chemicals Ltd.** (A subsidiary of **Sogemines Ltd.**)

Sales of petroleum solvents were 6% higher in 1959.

An important mid-year development was North America's first bulk shipment of liquid ethylene. It traveled to Montreal from company's Sarnia plant in a specially-designed insulated tank trailer which maintained the gas in a liquid state at a temperature of 155 degrees below zero. This type of movement has broadened the domestic market and made possible substantial export shipments. Company is currently shipping ethylene in this form to Montreal to Union Carbide operations there and some export to a Buffalo-based chemical firm.

Imperial Oil

Current outlook indicates further sales gains in petrochemicals this year from company's Sarnia facilities. Ethylene sales will show a substantial increase from 1959 as a result of supplying larger quantities to present consumers and to new consumers bringing plants into operation.

Company's line of detergent alkylates has been broadened by introduction of two new high quality products which the company claims completely cover the exacting performance characteristics demanded by domestic and export markets.

The aliphatics solvents are gaining further acceptance by the surface coatings and dry cleaning industries and sale of Imperial Odorless Solvent is showing good growth since the new product was introduced late last year.

Detergent alkylate sales in 1959 increased 21% over previous year and another grade was added to meet specialty quality characteristics of competitive imports. The company looks on this development to protect its domestic market and improve its export position.

Polymer Corp.

Is producing at its highest rate in history — around 155,000 tons-a-year rate. This is up from previous 1958 peak rate of 135,000 tons. Management anticipates operating at this peak level for the remainder of the year. Currently some 30% of company's synthetic rubber products are going to Canadian buyers, 65% to foreign buyers and 5% to U. S.

Polymer is now actually making one of the exciting, new-type synthetic rubbers expected to largely revolutionize the industry over the next few years. This is polybutadiene. This is being made in rather small monthly volumes and is being shipped out to customers for evaluation.

Plans are completed for construction of a commercial unit to make polybutadiene rubber as soon as scaling up of pilot plant operations is completed and more complete market information is available. An initial commercial unit would cost somewhere between $5 and $10 million.

Polymer has virtually decided on polybutadiene although could make a last minute switch yet if company decided polyisoprene looked better. The new rubbers are made by completely different processes and require entirely new plant and equipment. They have been made possible by the new Ziegler catalysts. Wtih these man can control more closely than before the molecular structure of his new product.

Shell Oil

Company's Montreal East petrochemical plant complex is showing bigger volume increases this year than last. But sharpening competitive practices is shaving profits further.

Isopropyl alcohol is moving in steady volume with promising export quantities going to South America. Company enjoys a high degree of flexibility in its solvents plant (I.P.A., acetone, methyl butyl alcohl and methyl-ethyl-ketone). Can alter production considerably in line with market changes. Management is continuing to boost capacity of this plant through removal of bottlenecks and improved manufacturing techniques. Actually capacity has been doubled since plant first went on stream several years ago.

The alkylate plant is operating actively. Company is presently making two grades of detergent alkylate, as well as a motor alkylate.

Epoxy resin use is expanding with coatings still providing the market backbone. More and more is being used in maintenance paint. A promising new use is seen in a road coating to protect surfaces from use of highway salt.

Company is currently producing some 30,000 tons of elemental sulphur annually at its Jumping Pound field in Alberta and has an interest in the 120,000 tons-a-year being produced at the Okotoks field.

Union Carbide

Chemicals and plastics business was up 10% in the first four months of this year. Company is hopeful that it can maintain this trend throughout the remainder of the year. Some export business both in chemicals and plastics is contributing to sales position.

The big Montreal East petrochemical plant has been undergoing continuous expansion since 1955, its first year of manufacture. From raw materials supplied by three neighboring refineries, the plant converts petroleum refinery gas concentrates into polyethylene resins as well as a diverse range of chemicals, all derived from ethylene. Additional ethylene in liquid form from Imperial Oil's Sarnia operations is supplementing the local supply, the ethylene being transported at extremely low temperatures in special highway tankers developed by Union Carbide.

When finished this year a third major expansion in polyethylene production facilities at Montreal will provide a total capacity of 65 million lb. annually, making this one of the world's largest producers of polyethylene resins and compounds.

Also under way is a further multi-million dollar expansion at Montreal plant involving a doubling of existing facilities for ethylene oxide and oxide derivatives. This project will be completed by the fall of 1961.

Company has just recently completed a new polyethylene customer service and product development laboratory at the Montreal East plant site. Modern development facilities have been installed making it possible to duplicate plant unit operations and customer processes under closely controlled conditions.

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modern industry. New avenues of pleasure and fun are now open to you because of Monsanto research. From automobile paints to beautiful vinyl upholstery materials, from oil additives to tough rubber tires, from cosmetics to care-free clothing, more and more Monsanto chemicals and plastics are being used by industry to create new processes, new jobs, and new comforts for modern living. Apply this world of experience to your field. Contact Monsanto.

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ORLON ACRYLIC fibre and viscose makes up material of this warm-weather plaid wardrobe. Du Pont of Canada manufactures Orlon at its Maitland, Ont., plant.

Tariff Hearings Sept. 12

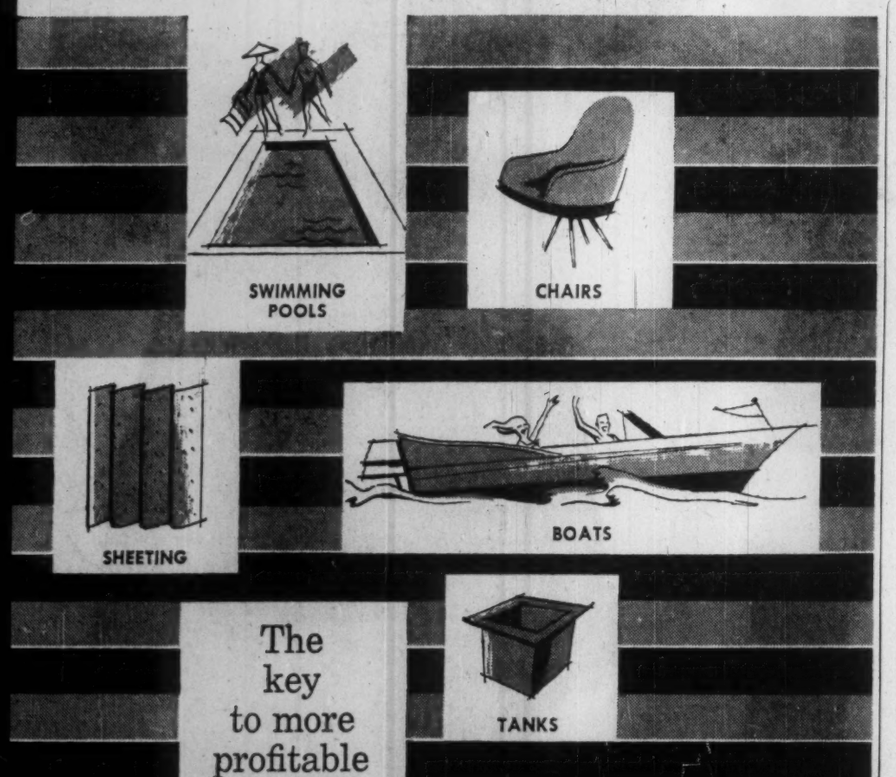
The first hearings of the first major tariff review of the Canadian chemical industry in over 50 years will begin Sept. 12 next.

The federal Tariff Board has concluded that at least 39 sets of public hearings will be required to cover the full tariff. They will run for at least 141 days spread out at intervals over the next three years.

The board will follow the Canadian chemical industry's proposal that the so-called "Brussels nomenclature" be used in classifying chemicals to be considered at the hearings. The Brussels system is widely used in Europe.

Following are dates of the sittings announced by the board with chemicals to be considered:

- **Sept. 12:** Brussels items 28.01 to 28.05, halogens, sulphur, carbon, hydrogen, rare gases and other metalloids.
- **Sept. 26:** Items 28.06 to 28.10, hydrochloric acid, sulphur dioxide, sulphuric and nitric acid, some phosphorous compounds.
- **Nov. 7:** Items 28.11 to 28.15, some arsenic and barium compounds; a group of inorganic acids; halides and halogen compounds of non-metal or metalloids.
- **Nov. 21:** Items 28.16 to 28.23, ammonia; oxides of strontium, barium and magnesium; zinc oxide; chromium, manganese and iron oxides.
- **Jan. 9:** Items 28.24 to 28.28, cobalt titanium and lead oxides; other inorganic bases and metallic oxides.
- **Jan. 23:** Items 28.29 to 28.32, item 25.01, fluorides, chlorides and oxychlorides, chlorates and chlorites.
- **Feb. 6:** Items 28.33 to 28.39, bromides, ioxides, sulphides, dithonites, sulphates, nitrates and nitrites.
- **Feb. 20:** Items 28.40 to 28.48, phosphites, arsenites, carbonites, cyanides, fulminates, borates; salts of metallic acids; other salts of inorganic acids.
- **March 6:** Items 28.49 to 28.58, colloidal precious metals and amalgams and compounds of precious metals; radioactive chemical elements and radioactive isotopes; deuterium; salts of thorium, uranium; liquid air, hydrogen peroxide, carbides, hydrides, solicides and borides.



The key to more profitable moulding

POLYCHEM

Moulding reinforced plastic products is only profitable when the desired production speed and quality can be reached. Habitual delays, due to the uneven consistency of the Polyester resin, has led many a moulder into undue difficulty and loss of profits. It therefore makes good sense to specify a resin which has been tried and proven by many of the major fabricators in Canada. POLYCHEM Polyesters are of unquestionable quality—consistency, curing qualities remain unequalled.

Extensive laboratory facilities, staffed by capable chemical engineers, have solved many a problem for moulders in all parts of Canada. This highly trained staff are continuously testing and improving POLYCHEM resins and accessories so that they will always be recognized as the leading products in their field.

Increase your production and profits—call in a representative from Chemical Oil & Resin Co. today, 1444 Dupont Street, Toronto, LE 3-8938. Agents: T. M. Holdsworth & Company, Vancouver, B.C.; The Pigment & Chemical Co. Ltd., Montreal, P.Q.

Chemical Oil & Resin Company

POLYESTERS • GEL COATS • COLOUR CONCENTRATES

COR

'Keep Our Chemists Here'

(CONTINUED FROM P. 67)

poor employers of researchers and development personnel.

Certainly there is some truth in this. T. W. Smith found 10 years ago that 40% of the professional chemists employed in the U. S. were engaged in research. The percentage in Canada was not much more than half this — 24%. This situation is being remedied by the actions of people in industry.

There has been a great, continuous public uproar about the lack of independence of U. S. subsidiaries in Canada, and their tendency to merely accept and apply the research and development results handed them by their parents.

This outcry — and the type of men now staffing U. S. subsidiary companies in Canada — have brought results.

But there must be more outcry, among chemists and chemical engineers and among all scientists, before we will have government recognition that secondary industry must be more strongly pushed.

And we should make this outcry for two reasons:

- **Because it will in the long run** be good for the economic development of Canada.
- **Not simply because** it would be selfishly good for us —but because by keeping people like us at home and employed, Canada will stop losing her most valuable asset — her talented men and women.

Of course this oversimplifies the picture.

We are not going to get prosperous and grow new secondary industries just through some changes in government thinking and policies.

Nobody in the chemical industry is likely to deny that more realistic policy from Ottawa, including tariff policy, would be a big help. But naturally, both management and labor must also play their part.

There has been complacency in management of the Canadian prosperity.

Markets have been relatively easy to find and, until things tightened up two years ago, there was not nearly enough looking into the future, nor planning for it, nor engaging in long-range research.

And there are cases where Canadian manufacturers with favorable export possibilities did not take advantage of them, or did not move to protect them—note, for example, the pulp and paper industry's lateness to recognize the threat of United States southern pine.

In addition, because times have been prosperous, there has been a tendency for labor to make demands that could in the long run defeat labor's own purpose of continually increasing income and employment.

Drugs

Exports to all countries of drugs, medicinal and pharmaceutical preparations for 1950-58:

1950	$4,297,654
1951	6,036,553
1952	5,087,949
1953	5,659,105
1954	5,475,727
1955	4,247,692
1956	5,349,076
1957	6,834,761
1958	9,560,103

Imports from all countries of drugs, medicinal and pharmaceutical preparations for 1950-58:

1950	$18,629,297
1951	22,427,117
1952	21,780,213
1953	22,417,251
1954	24,980,747
1955	24,599,475
1956	26,121,052
1957	28,391,509
1958	29,248,084

Source: DBS.

PRICE CUTS

Dow Corning Silicones Ltd. has recently announced one of its biggest price cuts yet for a popular type silicone resin intermediate. The price per drum has been reduced 28%.

Introduced in 1957, Z-6018 has shown considerable acceptance among formulators of protective coatings, allowing paint chemists to custom blend formulations that meet specific requirements accurately and also exhibit a wide safety margin.

Cellophane Continues To Expand

Despite expanded use of other packaging films, there will be continued growth for Cellophane cellulose film, a **Du Pont of Canada** official stated recently.

The year 1959 was the biggest one yet for Cellophane and 1960 is expected to surpass even this by a substantial margin.

"There seems to be some feeling that Cellophane is on the way out and that plastic films like polyethylene have all but taken over," F. S. McCarthy, manager of Du Pont's film department said.

"We do not sell Cellophane as a commodity. We sell a force in merchandising, a force which helps to move a product from the supermarket shelf to the shopper's buggy.

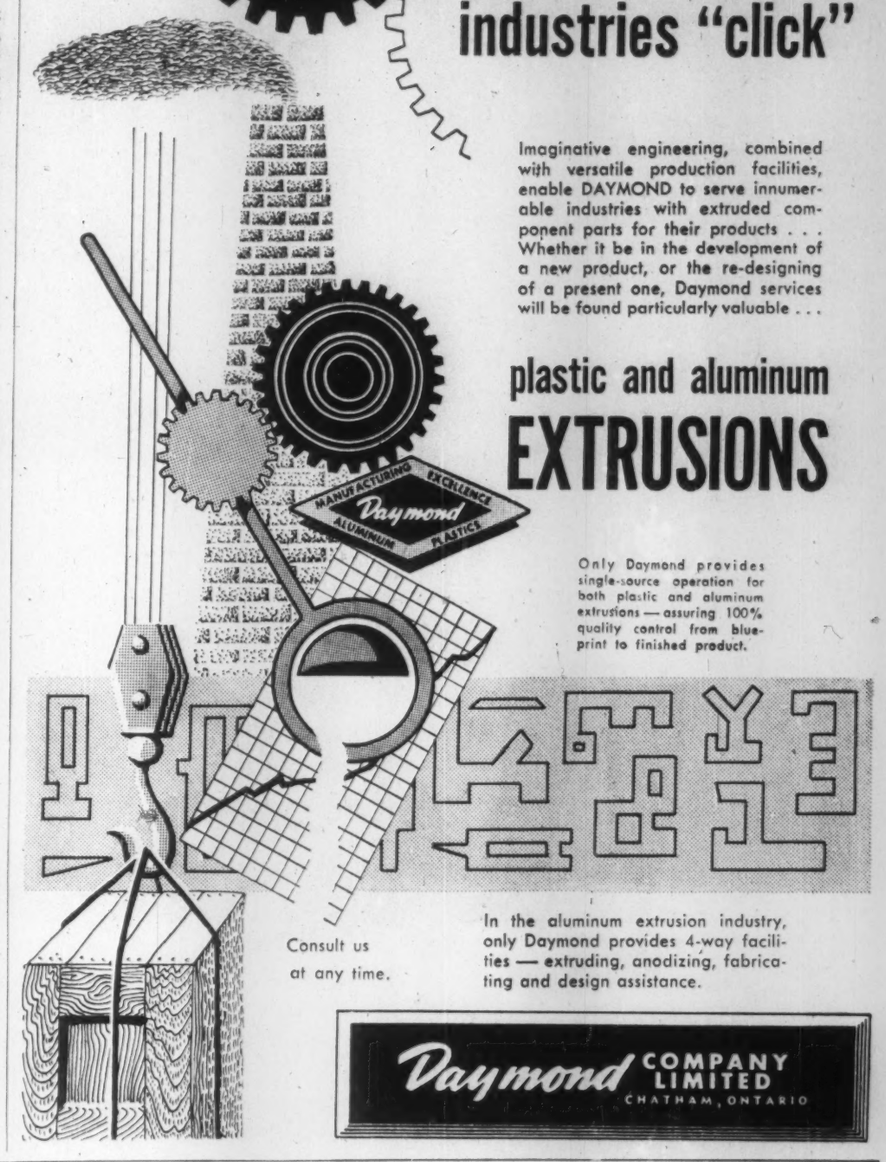
"This force is based on some very subtle properties such as gloss, sparkle, clarity, smoothness, excellence of printing and, in many cases, the impression that the merchandise is something special, what might be called the deluxe look," Mr. McCarthy stated.

"We believe that Cellophane offers more value per dollar in these subtle properties than any other film."

Du Pont of Canada also makes polyethylene film and sells Mylar polyester film, both of which compete with cellulose film in the packaging industry.

HERE'S HOW ONE CANADIAN COMPANY...

helps many other industries "click"



Imaginative engineering, combined with versatile production facilities, enable DAYMOND to serve innumerable industries with extruded component parts for their products . . . Whether it be in the development of a new product, or the re-designing of a present one, Daymond services will be found particularly valuable . . .

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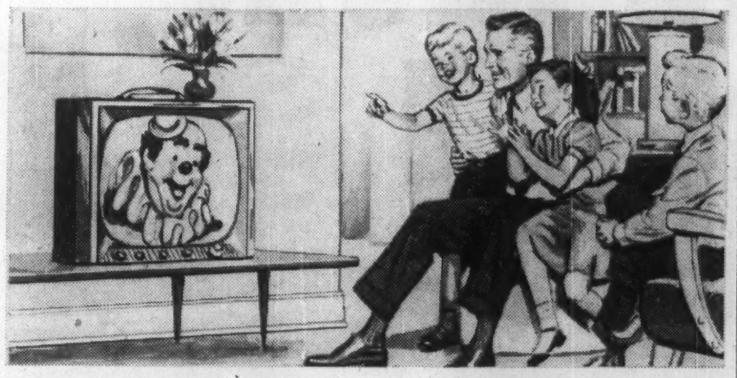

COUNTLESS PRODUCTS BENEFIT from the combination of beauty and durability Pittsburgh SELECTRON Polyester Resins can give—and usually at reduced manufacturing costs.

SELECTRON Resins are thermo-setting polyesters which are available in consistency from a thin syrup to extremely high viscosity. They polymerize to form solids, with or without heat and with or without pressure.

When combined with such fillers as—Fiberglas*, cotton, rayon, nylon, felt, sisal, paper, etc., SELECTRON Resins provide a new kind of material that is lighter than aluminum, yet—weight for weight—is stronger than steel. This material has great impact resistance and withstands the deteriorating influence of water, sunlight, heat, abrasion and many chemicals. It can be molded in durable colors.

Parts in which SELECTRON Resins are used can be molded either by hand lay-up, direct molding, continuous lamination or preforming. These resins can also be used without fillers for casting, potting and impregnating.

Investigate the advantages of SELECTRON Resins that may make your products better looking, stronger and more durable. We'll be glad to have one of our engineers discuss your problems with you without cost or obligation. Such a visit may point the way to important production economies and added sales appeal. Contact Canadian Pittsburgh Industries Limited, 1600 Lakeshore Road, Long Branch, Ontario.

Just a few products in which Pittsburgh SELECTRON Resins are now used—

Aircraft structural parts
Radomes for electronic equipment
Life Floats • Ballistic panels
Helmets • Boat hulls
Machinery housing and guards
Trays • Tote Boxes
Food lockers
Garbage pails
Baskets for automatic dishwashers
Baskets for automatic washers
Wash tubs • Tool chests
Shipping containers
Instrument cases
Laundry hampers
Kitchen containers
Fishing rods • Sinks
Street signs • Traffic signs
Fluorescent light fixtures
Television cabinets
Loudspeaker housings
Gas meter housings
Structural panels for offices and homes
Door and transom lights
Awnings and canopies
Greenhouse panels
Skylighting • Molded chairs
Prefabricated houses and garages
Truck bodies

* T.M. Reg.

selectron resin products

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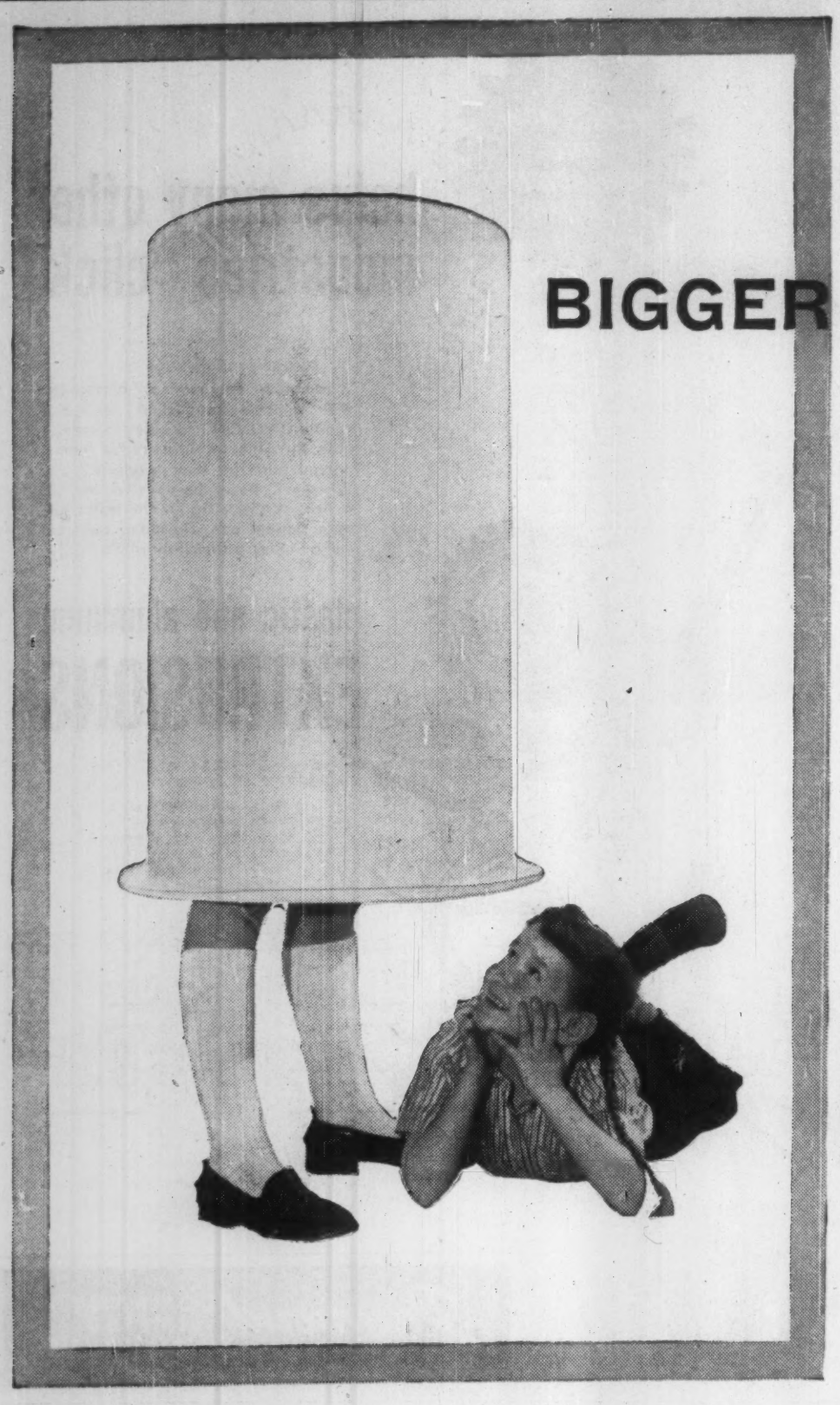

POLYTHENE makes them possible!

It has been another good year for today's most versatile plastic. Polythene has made possible still more products that work better...or look better . . . or cost less . . . or all three. Pictured above are some recent, typical polythene successes. Here's a brief run-down on each:

Bigger containers. Polythene is now being formed into containers, as large as 200 gallon capacity, that are impervious to all common acids, virtually unbreakable, inexpensive, light enough to be lifted by a child. They reduce handling and storage costs dramatically.

Better blasts. A flexible polythene film package lets "Hydromex"—a new, semi-fluid blasting agent—bend and expand to conform to the shape of a bore hole. This insures maximum loading density, which means optimum blasting results.

Telephone talks. The transatlantic telephone cable which will be laid in 1961 has a radically new design, using polythene for insulation and protective sheathing. The new cable is smaller in diameter than the type previously used, but has almost double the capacity for carrying conversations, is one-third lighter.

Polythene today has many, many uses—as film, pipe, wire insulation and cable sheathing, housewares, paper coating, containers—and more are sure to be discovered in the immediate future. Polythene could mean improved performance and added sales value for your products. Check the possibilities with . . .

Canadian Industries Limited, Plastics Division, P.O. Box 10, Montreal.

C-I-L Polythene